Appendix C

AQ-GHG-HRA Technical Report

Air Quality, Greenhouse Gas Emissions, and Energy Technical Report

Imperial County Lithium Valley Specific Plan Program Environmental Impact Report

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Acronyms and Abbreviations

Acronym/Abbreviation	Definition
2008 Scoping Plan	Climate Change Scoping Plan: A Framework for Change
2017 Ozone SIP	Imperial County 2017 State Implementation Plan for the 2008 8-Hour Ozone Standard
2018 PM_{10} Plan	Imperial County 2018 Redesignation Request and Maintenance Plan for Particulate Matter less than 10 Microns in Diameter
2022 Scoping Plan	2022 Scoping Plan for Achieving Carbon Neutrality
AB	Assembly Bill
ACC	Advanced Clean Cars Program
AERMOD	American Meteorological Society/Environmental Protection Agency Regulatory Model
AQMP	air quality management plan
BenMAP	Benefits Mapping and Analysis Program
BESS	battery energy storage system
CAAQS	California Ambient Air Quality Standards
CalEEMod	California Emissions Estimator Model
CALGreen	California Green Building Standards
CalRecycle	California Department of Resources Recycling and Recovery
CARB	California Air Resources Board
CEC	California Energy Commission
CERP	Community Emissions Reduction Program
CEQA	California Environmental Quality Act
CFC	chlorofluorocarbon
CH_4	methane
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalent
Commercial Forecast	2018–2030 Uncalibrated Commercial Sector Forecast
County	County of Imperial
CPUC	California Public Utilities Commission
CTMP	construction traffic management plan
DPM	diesel particulate matter
EIR	environmental impact report
EISA	Energy Independence and Security Act
EO	Executive Order
EPA	U.S. Environmental Protection Agency
EV	electric vehicle
First Update	First Update to the Climate Change Scoping Plan: Building on the Framework
GHG	greenhouse gas
GWP	global warming potential
HAP	hazardous air pollutant

Acronym/Abbreviation	Definition
HCFC	hydrochlorofluorocarbon
HFC	hydrofluorocarbon
HIA	health impact assessment
HPI	Healthy Places Index
HRA	health risk assessment
ICAPCD	Imperial County Air Pollution Control District
ICRCAP	Imperial County Regional Climate Action Plan
ICTC	Imperial County Transportation Commission
IID	Imperial Irrigation District
IRA	
ITE	Institute of Transportation Engineers
IVT	Imperial Valley Transit
kBTU	thousand British thermal units
KGRA	Known Geothermal Resource Area
kW	kilowatt
kWh	kilowatt-hour
LCE	lithium carbonate equivalent
LCFS	Low Carbon Fuel Standard
LED	light-emitting diode
LVSP	Lithium Valley Specific Plan
MERV	Minimum Efficiency Reporting Value
MM	Mitigation Measure
MMT	million metric tons
MPO	metropolitan planning organization
MT	metric ton
MW	megawatt
MWh	megawatt-hour
N_2O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NHTSA	National Highway Traffic Safety Administration
NO_2	nitrogen dioxide
NO_x	oxides of nitrogen
O_3	ozone
OBBBA	One Big Beautiful Bill Act
PFC	perfluorocarbon
Plan Area	Specific Plan Area
PM	particulate matter
PM_{10}	particulate matter with an aerodynamic diameter less than or equal to 10 microns
$PM_{2.5}$	particulate matter with an aerodynamic diameter less than or equal to 2.5 microns
ppm	parts per million
project	Lithium Valley Specific Plan Project
PV	photovoltaic

Acronym/Abbreviation	Definition
RASS	Residential Appliance Saturation Survey
RFS	Renewable Fuel Standard
RPS	Renewables Portfolio Standard
RTP	Regional Transportation Plan
SAFE	Safer Affordable Fuel-Efficient
SB	Senate Bill
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCS	Sustainable Communities Strategy
Second Update	2017 Climate Change Scoping Plan Update
SF_6	sulfur hexafluoride
SIP	State Implementation Plan
SJVAPCD	San Joaquin Valley Air Pollution Control District
SO_2	sulfur dioxide
SoCalGas	Southern California Gas Company
SO_x	sulfur oxides
SR	State Route
SSAB	Salton Sea Air Basin
TAC	toxic air contaminant
TDM	transportation demand management
VDE	visible dust emissions
VMT	vehicle miles traveled
VOC	volatile organic compound
ZEV	zero-emission vehicle

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Executive Summary

The purpose of this technical report is to assess the potential air quality, greenhouse gas (GHG) emissions, and energy impacts associated with implementation of the proposed Lithium Valley Specific Plan Project (LVSP/proposed project/project) in the County of Imperial (County), California. This assessment utilizes the significance thresholds in Appendix G of the California Environmental Quality Act (CEQA) Guidelines (14 CCR 15000 et seq.) and is based on the emissions-based significance thresholds recommended by the Imperial County Air Pollution Control District (ICAPCD) for air quality and other applicable thresholds of significance. This report is intended to support the Program Environmental Impact Report prepared for the LVSP.

Project Overview

The LVSP aims to develop a Specific Plan in the northern portion of the Imperial Valley, specifically along the southeastern part of the Salton Sea, that plans for the continued development of renewable energy and related industries including the extraction, refinement, and manufacturing use of lithium. The Specific Plan Area (Plan Area) covers approximately 51,622 acres and consists primarily of existing agricultural properties, wetlands, wildlife areas, open spaces, and energy facilities. A first phase or focus area of approximately 10,000 acres has been identified and is intended to include the most near-term development and uses. The goal of the project is to frame and guide the development of renewable energy sources, such as geothermal and solar energy, as well as lithium extraction and associated industrial uses and infrastructure improvements. The development is driven by federal and state renewable energy and GHG reduction goals, with a focus of providing resources for battery-powered vehicles. The project would require the construction of facilities and infrastructure to support these developments. The project site is located within the Salton Sea Air Basin and is under the jurisdiction of ICAPCD.

Air Quality

The air quality impact analysis evaluates the potential for adverse impacts to air quality due to construction and operational emissions resulting from the project. Impacts were evaluated for their significance based on the ICAPCD mass daily criteria air pollutant thresholds of significance. Criteria air pollutants are defined as pollutants for which the federal and state governments have established ambient air quality standards, or criteria, for outdoor concentrations to protect public health. Criteria air pollutants include ozone, nitrogen dioxide, carbon monoxide (CO), sulfur dioxide, particulate matter (PM) with an aerodynamic diameter less than or equal to 10 microns (PM_{10}, also known as coarse PM), PM with an aerodynamic diameter less than or equal to 2.5 microns ($PM_{2.5}$, also known as fine PM), and lead. Pollutants that are evaluated include volatile organic compounds (VOCs) (also referred to as reactive organic gases (ROGs)), oxides of nitrogen (NO_x), CO, sulfur oxides (SO_x), PM_{10}, and $PM_{2.5}$. VOCs, and NO_x are important because they are precursors to ozone.

Air Quality Plan Consistency

The Plan Area falls under the jurisdiction of ICAPCD, which oversees air quality compliance through plans like the 2018 Redesignation Request and Maintenance Plan for Particulate Matter less than 10 Microns in Diameter and the 2017 State Implementation Plan for the 2008 8-Hour Ozone Standard. The proposed project aligns with local land use designations, including allowances for geothermal development, and supports the Southern California Association of Governments' regional goals for sustainable growth. However, the project's scale, particularly the

creation of approximately 40,000 jobs and increased development density, exceeds regional growth projections used in air quality planning.

The project would exceed the growth forecasts used to develop ICACPD's attainment plans. Thus, the project would potentially conflict with or obstruct the applicable air quality plan prior to mitigation. Implementation of Mitigation Measure (MM)-POP-1 would ensure that the appropriate residential and employment growth projections of the Plan Area would be incorporated into the next Southern California Association of Governments Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) (anticipated to be the 2028 RTP/SCS). Nonetheless, the LVSP would still conflict with the regional growth projections used to prepare the air quality management plans (AQMPs) for the Salton Sea Air Basin.

The project would not conflict with the applicable portions of the County North End Phase 1 Community Emissions Reduction Program.

Therefore, the project's potential to conflict with or obstruct implementation of the applicable air quality plan would be **significant and unavoidable.**

Potential to Result in a Cumulatively Considerable Net Increase of Any Nonattainment Criteria Pollutant

Construction Criteria Air Pollutant Emissions

Construction of the LVSP would result in the temporary addition of pollutants to the local airshed caused by on-site sources (i.e., off-road construction equipment, soil disturbance, and VOC off-gassing) and off-site sources (i.e., on-road haul trucks, vendor trucks, and worker vehicle trips). Construction of Phase 1, Phase 2, and Phase 3 of the project would exceed the criteria pollutant thresholds for VOCs, NO_x, CO, PM_{10}, and $PM_{2.5}$ established by ICAPCD with implementation of LVSP measures and regulations, resulting in a **significant** impact prior to mitigation. MM-AQ-1 through MM-AQ-5 would be implemented to reduce the project's criteria air pollutant emissions during construction but were not quantified. Therefore, construction-related impacts associated with a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment would be **significant and unavoidable**.

Operational Criteria Air Pollutant Emissions

Operation of the LVSP would generate criteria air pollutant emissions from mobile sources (vehicular traffic), area sources (hearths, consumer products, architectural coatings, and landscaping equipment), energy sources (natural gas consumption), off-road equipment, and stationary sources. During operation of two interim phases and buildout, the project would exceed the numerical thresholds of significance established by ICAPCD for emissions of VOCs, NO_x, CO, PM_{10}, and $PM_{2.5}$ with implementation of LVSP measures and regulations, resulting in a **significant** impact prior to mitigation. MM-AQ-5 through MM-AQ-10 and MM-TRA-1 through MM-TRA-4 would be implemented to reduce the project's criteria air pollutant emissions during operation but were not quantified. Therefore, the project would result in a cumulatively considerable increase in emissions of nonattainment pollutants, and the impact would be **significant and unavoidable**. Concurrent construction and operational activities would also exceed the numerical thresholds of significance recommended by ICAPCD for operational emissions of VOCs, NO_x, CO, PM_{10}, and $PM_{2.5}$.

Exposure of Sensitive Receptors

Carbon Monoxide Hotspots

The project would not expose sensitive receptors to localized high concentrations of CO or contribute to traffic volumes at intersections that would cause a CO hotspot during construction or operation. As such, potential construction or operational CO hotspot impacts would be **less than significant** without mitigation.

Health Risk

An health risk assessment was performed to estimate the Maximum Individual Cancer Risk and the chronic hazard index for proximate residential receptors because of project construction and operation. The project's toxic air contaminant (TAC) health risk impacts would be **significant** prior to mitigation.

MM-AQ-1 through MM-AQ-9 would be implemented to reduce the project's TAC emissions during construction and operation but were not able to be quantified. Therefore, impacts associated with exposing sensitive receptors to substantial TAC concentrations would be **significant and unavoidable**.

Valley Fever

Valley fever is not highly endemic to Imperial County. Nonetheless, in order to reduce fugitive dust from the project and minimize adverse air quality impacts, the LVSP would employ dust control measures in accordance with the rules under ICAPCD Regulation VIII, Fugitive Dust Control Measures, which limit the amount of fugitive dust generated during construction. Furthermore, the implementation of Policy Health and Prosperity (HP)-18 would go beyond the requirements of ICAPCD Regulation VIII and would be implemented to further reduce fugitive dust generated by the LVSP during construction. However, the magnitude of fugitive dust emissions (PM_{10}) during construction is substantial and significant, and impacts associated with valley fever exposure for sensitive receptors during construction would be **significant**. The project would implement MM-AQ-10, Valley Fever Exposure Minimization, which would reduce the impact of valley fever exposure for sensitive receptors during construction to **less than significant with mitigation.**

During operation, the LVSP would require that all roads used by future developments projects within the Plan Area would need to be paved, per Policy HP-19, Paved Roads, which would limit the amount of fugitive dust generated from vehicle travel. Operational activities would not involve substantial earth-moving activities, and valley fever spores would therefore have little potential to be released. As such, impacts associated with valley fever exposure for sensitive receptors during operation would be **less than significant**.

Other Emissions (Odors)

The analysis of other emissions (such as those leading to odors) is focused on the potential for an odor impact to occur. Potential odors produced during project construction would be attributable to architectural coatings, asphalt pavement application, and concentrations of unburned hydrocarbons from tailpipes of construction equipment, all of which would disperse rapidly from the project site and generally occur at magnitudes that would not affect substantial numbers of people. Impacts associated with odors during construction would be **less than significant**.

Land uses and industrial operations associated with odor complaints include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass

molding. Wastewater treatment plant and anaerobic digester facilities are proposed as land uses to be developed under the LVSP. Although these facilities are required to have advanced odor management systems (e.g., biofilters or carbon scrubbers) to control and minimize off-site odor impacts, they still have the potential to create new sources of odors during operation and would result in an odor impact that is **significant.** The project would implement MM-AQ-11, Odor Control and Abatement Program – Anaerobic Digester Facilities and Wastewater Treatment Plants, which would reduce the impact of odors during operation to **less than significant with mitigation.**

Greenhouse Gas Emissions

GHGs are gases that absorb infrared radiation in the atmosphere. Principal GHGs regulated under state and federal law and regulations and that are evaluated herein include carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O). GHG emissions are measured in metric tons (MT) of CO_2 equivalent (CO_2e), which account for weighted global warming potential (GWP) factors for CH_4 and N_2O.

Construction and Operational Greenhouse Gas Emissions

For operations, because the LVSP is a Specific Plan project that allows for the development of multiple land uses across different sectors, the LVSP's operational GHG emissions are compared to the quantitative threshold of 3,000 MT CO_2e per year. In summary, operation of the LVSP plus amortized construction GHG emissions would exceed the 3,000 MT CO_2e per year threshold in Phase 1 (2035), Phase 2 (2045), and Phase 3 (2055). As such, the project would result in a **significant** impact. MM-GHG-1 through MM-GHG-4 would reduce GHG emissions associated with implementation of the LVSP. However, the effectiveness of all mitigation is not quantifiable, and the LVSP would still exceed the 3,000 MT CO_2e per year threshold in Phase 1 (2035), Phase 2 (2045), and Phase 3 (2055), resulting in a **significant and unavoidable impact**.

Potential to Conflict with Plans

The potential for the project to conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs is qualitatively evaluated through analyses of the LVSP's potential to conflict with state GHG reduction targets contained in the CARB 2022 Scoping Plan for Achieving Carbon Neutrality (2022 Scoping Plan) and relevant measures within the County Regional Climate Action Plan.

The project would not conflict with the overall goals of the 2022 Scoping Plan. The impact would be **less than significant.**

Overall, the LVSP would not conflict with the County Regional Climate Action Plan. The LVSP would support, as feasible, the measures and overarching goals therein to address the impacts of climate change and reduce GHG emissions in the region. Therefore, the impact would be **less than significant**.

Energy

Wasteful, Inefficient, or Unnecessary Energy Resource Consumption

During construction and operation, the project would consume energy, including electricity, natural gas, and petroleum. Renewable energy sources to be developed as part of the LVSP include geothermal facilities, commercial-scale photovoltaic fields, agrivoltaic solar fields, and floatovoltaic solar fields. The project would not

result in wasteful, inefficient, or unnecessary consumption of energy resources, including electricity, natural gas, or petroleum, during project construction or operation. Impacts would be **less than significant**.

Mitigation Measures

MM-AQ-1 Additional Construction Equipment Emission Reductions. Prior to the issuance of grading permits, an individual project applicant or its designee shall provide evidence to the County of Imperial (County) that the following strategies shall be implemented during the project's construction phase:

A. Use electric- or hybrid-powered equipment for generators and other small pieces of equipment over 25 horsepower (e.g., forklifts), as commercially available.

B. Use cleaner fuel equipment, such as replacing diesel fuel with compressed natural gas or renewable diesel, as commercially available.

Commercially available equipment is herein defined as equipment sourced within 50 vehicle miles of the project site and within 10% of the cost of the diesel-fueled-equivalent equipment. The individual project applicant must contact at least three contractors or vendors within the County and submit to the County justification if the specified equipment is not commercially available.

MM-AQ-2 Notification of Construction Activities. Prior to the commencement of any construction activities, the applicant or its designee shall provide evidence to the County of Imperial that the applicant has employed a construction relations officer who will address community concerns regarding on-site construction activity. The applicant shall provide public notification in the form of a visible sign containing the contact information of the construction relations officer, who shall document complaints and concerns regarding on-site construction activity. The sign shall be placed in easily accessible locations and noted on grading and improvement plans.

MM-AQ-3 Limit Truck and Equipment Idling During Construction. The project applicant shall reduce idling time of heavy-duty trucks, either by requiring them to be shut off when not in use or limiting the time of idling to no more than 3 minutes (thereby improving upon the 5-minute idling limit required by the State Airborne Toxics Control Measure to Limit Diesel-Fueled commercial Motor Vehicle Idling, 13 CCR 2485). The project applicant shall post clear signage reminding construction workers to limit idling of construction equipment.

MM-AQ-4 Use of Super-Compliant Low-VOC Paint During Construction. During construction, the project shall use super-compliant low-VOC (volatile organic compound) paint (less than 10 grams per liter VOC) for all interior and exterior paint applications for residential and nonresidential land uses.

MM-AQ-5 Low-VOC Cleaning Supplies and Paint Educational Program. Prior to the occupancy of any on-site development, the applicant or its designee shall provide evidence to the County of Imperial that the applicant/phase developer has developed a green cleaning product and paint education program, to be made available at rental and purchasing offices and/or on websites. The educational program shall include a flyer (hardcopy and/or digital) that includes, at a minimum, an

explanation of what volatile organic compounds (VOCs) are, how VOCs affect us, where to find low-VOC alternatives for cleaning supplies and paint, and additional resources for learning more.

MM-AQ-6 Landscape Maintenance Equipment Emission Reduction. The project applicant shall implement the following landscape maintenance equipment emission reduction measures:

a. **Include Outdoor Electrical Outlets.** Prior to the issuance of building permits, the project applicant or its designee shall provide evidence to the County of Imperial that the design plans include electrical outlets on structure exteriors to facilitate the use of electrical lawn and garden equipment.
b. **Encourage Use of Existing Yard Equipment Exchange and Rebate Programs.** Educational materials shall be provided to future residents about the Imperial County Air Pollution Control District Electric Lawn Mower Rebate Program and the Commercial Lawn Equipment Exchange Program. When conventional gasoline-powered yard equipment (e.g., lawn mowers, leaf blowers and vacuums, shredders, trimmers, and chainsaws) is exchanged for electric and rechargeable battery-powered yard equipment, direct greenhouse gas (GHG) emissions from fossil fuel combustion are displaced by indirect GHG emissions associated with the generation of electricity used to power the equipment.

MM-AQ-7 Idling Time Restriction. The following measure shall be implemented during all ongoing business operations and shall be included as part of contractual lease agreement language to ensure that tenants and operators of future development projects are informed of the following operational responsibility: Upon commencement of operations, the tenant/operator of future development projects shall be required to restrict truck idling on site to a maximum of 3 minutes, subject to exceptions defined by the California Air Resources Board's commercial vehicle idling requirements. The building manager or their designee shall be responsible for enforcing this requirement.

MM-AQ-8 Anti-Idling Implementation Measures. The following measures shall be implemented to reduce air pollutant emissions from idling during operations:

A. **Signage.** Legible, durable, weatherproof signs that identify the project's 3-minute idling restriction shall be placed at truck access gates, loading docks, and truck parking areas. At a minimum, each sign shall include: (1) instructions for truck drivers to shut off engines when not in use; (2) instructions for drivers of diesel trucks to restrict idling to no more than 3 minutes once the vehicle is stopped, the transmission is set to "neutral" or "park," and the parking brake is engaged; (3) telephone numbers of the building facilities manager and California Air Resources Board (CARB) to report violations; and (4) that penalties apply for violations. Prior to the issuance of an occupancy permit, the County of Imperial shall conduct a site inspection to ensure that the signs are in place.
B. **Efficient Load Management.** The facility operator(s) shall be required to train managers and employees on efficient scheduling and load management to eliminate unnecessary queuing and idling of trucks.
C. **Anti-Idling Training.** Tenants and operators at each project site shall ensure that site enforcement staff in charge of keeping the daily log and monitoring for excess idling will be trained/certified in diesel health effects and technologies, for example, by requiring attendance at CARB-approved courses (such as the free 1-day Course No. 512).

D. **Design of Ingress/Egress Points.** This mitigation applies to industrial land uses only. Entry gates into the loading dock/truck court areas shall be sufficiently positioned to ensure that all truck and other vehicles are contained on site and inside the property line. Queuing, or circling of vehicles, on public streets immediately pre- or post-entry to the project shall be strictly prohibited unless queuing occurs in a deceleration lane or right turn lane exclusively serving the Plan Area.

MM-AQ-9 Operational Backup Generator Emission Reductions. Prior to the issuance of building permits, an individual project applicant or its designee shall provide evidence to the County of Imperial (County) that any backup generators greater than 500 horsepower shall meet the U.S. Environmental Protection Agency's Tier 4 Final emission standards, to the extent feasible. If Tier 4 Final equipment is not available for a specific application, the project applicant shall provide documentation to the County demonstrating the unavailability and shall use the next-cleanest available technology, such as Tier 4 Interim or Tier 3 engines equipped with verified diesel emission control strategies, such as diesel particulate filters.

MM-AQ-10 Valley Fever Exposure Minimization. Prior to any ground-disturbing activities within Imperial County, the County of Imperial (County) or its designees shall implement the following valley fever provisions:

A. Between June 1 and November 30, when valley fever rates of infection are the highest, if wind speeds exceed 15 mph or temperatures exceed 95°F for 3 consecutive days, additional dust suppression measures (such as additional water or the application of additional soil stabilizer) shall be implemented prior to and immediately following ground-disturbing activities. The additional dust suppression shall continue until winds are 10 mph or lower and outdoor air temperatures are below 90°F for at least 2 consecutive days. The additional dust suppression measures shall be incorporated into the dust control plan.

B. Prior to any project forest treatment activity, the County shall prepare and implement a worker training program that describes potential health hazards associated with valley fever, common symptoms, proper safety procedures to minimize health hazards, and notification procedures if suspected work-related symptoms are identified during operation. The worker training program shall identify safety measures to be implemented by the County or its contractor during operation. Safety measures shall include the following:

- Provide HEPA-filtered air-conditioned enclosed cabs on heavy equipment. Train workers on the proper use of cabs, such as turning on air conditioning prior to using the equipment.
- Provide communication methods, such as two-way radios, for use by workers in enclosed cabs.
- Provide personal protective equipment, such as half-mask and/or full-mask respirators equipped with particulate filtration, to workers active in dusty work areas.
- Provide separate, clean eating areas with handwashing facilities for workers.
- Clean equipment, vehicles, and other items before they are moved off site to other work locations.

- Provide training for workers so they can recognize the symptoms of valley fever and promptly report suspected symptoms of work-related valley fever to a supervisor.
- Direct workers that exhibit valley fever symptoms to immediately seek a medical evaluation.

MM-AQ-11 Odor Control and Abatement Program – Anaerobic Digester Facilities and Wastewater Treatment Plants. Prior to issuing any building permits for odor-emitting facilities, the County of Imperial (County) or its designees shall implement the following odor control measures:

A. Odor Treatment Systems:
   - The County shall require the facility to install and maintain effective odor control technologies, such as biofilters, activated carbon filters, or scrubber systems, to capture and neutralize odorous gases at their source.
   - The County shall ensure that the facility conducts regular monitoring and maintenance to verify the performance of these odor control systems.

B. Regular Monitoring and Reporting:
   - The County shall mandate that the facility conduct regular odor monitoring at key locations around the site and at sensitive-receptor points (e.g., residential areas).
   - The County shall require the facility to submit periodic reports to ensure compliance with odor control standards and to evaluate the effectiveness of implemented measures.

C. Buffer Zones and Site Design:
   - The County shall ensure that an adequate buffer zone is maintained around odor-emitting facilities, including anaerobic digesters and wastewater treatment areas, to minimize exposure to sensitive receptors.
   - The County shall review and approve the facility's site design, ensuring that prevailing wind patterns and the distance to sensitive areas are considered, in order to reduce odor impacts.

MM-GHG-1 Energy Conservation – Prior to the issuance of building permits, the project applicant or its designee shall provide evidence to the County of Imperial that the building design plans include the following energy conservation measures:

- Install Energy Star–rated heating, cooling, lighting, and appliances.
- Outdoor lighting shall be light emitting diode (LED) or other high-efficiency lightbulbs.
- Install double-pane windows where possible.
- Prior to the issuance of building permits, the project applicant or its designee shall submit building plans illustrating installation of cool pavements in place of dark pavements. Outdoor pavements, such as walkways and patios, shall use paving materials with a 3-year solar reflectance index (SRI) of 0.28 or an initial SRI of 0.33.
- Provide information on energy efficiency, energy-efficient lighting and lighting control systems, energy management, and existing energy incentive programs to future residents of the project.

MM-GHG-2 Use Alternative Refrigerants Instead of High-GWP Refrigerants – Refrigerants with high global warming potential (GWP) shall be replaced with lower-GWP refrigerants (e.g., natural refrigerants such as carbon dioxide, ammonia, and hydrocarbons, or next-generation low-GWP synthetic refrigerants like hydrofluoroolefin-1234yf) in refrigeration and air conditioning equipment.

MM-GHG-3 Electric Vehicle Charging Infrastructure – Prior to the issuance of building permits, the project applicant or its designee shall provide evidence to the County of Imperial that the building design plans meet or exceed California Green Building Standards Code Tier 2 standards to encourage the use of electric vehicles.

MM-GHG-4 Sustainable Concrete Building Materials – Industrial Land Uses. The project shall be designed with sustainable materials that will reduce 35% of the overall carbon footprint compared to traditionally designed concrete tilt-up buildings. The following measures shall be implemented:

- The future developments shall reduce overall concrete in the slab by 10% through the use of a steel fiber mix to increase the overall strength of the concrete to reduce concrete thickness.
- The future developments shall reduce overall concrete in the tilt walls by 30% by providing 4-inch foam insultation in the middle of the concrete panel (also known as composite panels). Whereas traditional concrete tilt walls have no R-value, the foam insulation will result in an R-value of R-19, thereby reducing overall energy consumption and increasing occupant comfort.
- The roof shall have a 10% reduction in steel because of the lighter concrete tilt walls due to the foam insulation.
- The future developments' specifications shall require the use of sustainable concrete to reduce the project's overall carbon footprint by 35%.

MM-POP-1 SCAG Coordination and Inclusion in Regional Planning. Prior to recordation of the first final map or issuance of the first development permit (whichever occurs first), the County of Imperial shall submit the final adopted Lithium Valley Specific Plan to the Southern California Association of Governments for inclusion in regional planning documents, including the Regional Transportation Plan/Sustainable Communities Strategy and the Regional Housing Needs Assessment, as applicable. This action shall ensure that the employment and associated population growth facilitated by the Lithium Valley Specific Plan is recognized and incorporated into regional forecasts.

Summary of Findings

The results of this report are summarized in Table ES-1, below, based on the significance criteria in the impact analyses in Sections 2.4 (Air Quality), 3.4 (Greenhouse Gas Emissions), and 4.4 (Energy) and consistent with Appendix G of the CEQA Guidelines.

Table ES-1. Summary of Impact Determinations

Analysis	Report Section	Checklist Question	Significance Determinations	
			Unmitigated	Mitigated
Air Quality				
Would the project conflict with or obstruct implementation of the applicable air quality plan?	2.4.1	AQ-1	Significant	Significant and unavoidable
Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	2.4.2	AQ-2	Significant for construction Significant for operation	Significant and unavoidable for construction Significant and unavoidable for operation
Would the project expose sensitive receptors to substantial pollutant concentrations?	2.4.3	AQ-3	Less than significant for carbon monoxide hotspots Significant for health risk Significant for valley fever	Less than significant for carbon monoxide hotspots Significant and unavoidable for health risk Less than significant for valley fever
Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	2.4.4	AQ-4	Significant	Less than significant
Greenhouse Gas Emissions				
Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	3.5.1	GHG-a1 and GHG-a2	Significant	Significant and unavoidable
Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	3.5.2	GHG-2	Less than significant	Less than significant
Energy				
Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	4.4.1	Energy-1	Less than significant	Less than significant

Notes: AQ = air quality; GHG = greenhouse gases.

1 Introduction and Project Description

1.1 Report Purpose and Scope

The purpose of this technical report (report) is to assess the potential air quality, greenhouse gas (GHG) emissions, and energy impacts associated with implementation of the proposed Lithium Valley Specific Plan (LVSP) Project (LVSP or proposed project or project). This assessment uses the significance thresholds in Appendix G of the California Environmental Quality Act (CEQA) Guidelines (14 CCR 15000 et seq.) and is based on the emissions-based significance thresholds recommended by the Imperial County Air Pollution Control District (ICAPCD) and other applicable thresholds of significance.

This introductory chapter provides a description of the project and the project location. Chapter 2, Air Quality, describes the air-quality-related environmental setting, regulatory setting, existing air quality conditions, and thresholds of significance and analysis methodology, and presents an air quality impact analysis per Appendix G of the CEQA Guidelines. Chapter 3, Greenhouse Gas Emissions, describes the GHG-emissions-related environmental setting, regulatory setting, existing climate change conditions, and thresholds of significance and analysis methodology, and presents a GHG emissions impact analysis per Appendix G of the CEQA Guidelines. Chapter 4, Energy, similarly describes the energy-related environmental setting, regulatory setting, existing energy considerations, and thresholds of significance and analysis methodology, Chapter 5, References, includes a list of the references cited. Chapter 6, Preparers, includes a list of those who prepared this technical report.

1.2 Project Location

Imperial County, located in Southern California, lies to the east of San Diego County, west of the Arizona border, and north of the U.S.–Mexico border, which forms its southern boundary (see Figure 1, Vicinity Map). The proposed Specific Plan Area (Plan Area) is located in the northern portion of the County, bordering the Salton Sea. The Plan Area was designed to encompass a substantial portion of the Known Geothermal Resource Area (KGRA), but it excludes the unincorporated town of Niland and the City of Calipatria, as well as certain state- and federally owned lands within the Salton Sea.

The northern boundary of the Plan Area extends to include the railroad corridor, whereas the eastern boundary is marked by major transportation corridors, including State Route (SR) 111 and Gentry/Forrester Road, with close proximity to the north–south railroad line that runs parallel to SR-111. To the south, the Plan Area extends to reach the New River, further defining the project's spatial limits.

1.3 Existing Site Conditions

Imperial County has been characterized by extensive agricultural activities, with crop production and agricultural related industries a large employment sector. The County has a population of approximately 180,000 residents. The project is located near the Salton Sea, which is maintained by agricultural runoff from the Imperial and Coachella valleys. The Salton Sea supports an ecosystem that attracts hundreds of migratory bird species as a component of the Pacific Flyway, a major migratory route for birds traveling between North and South America, and supports a multitude of other wildlife. Elevated salinity levels and environmental toxins from reduced inflow and increased pollutants from the New River and Alamo River have led to a decline in fish and bird populations. This

area also includes much of the Salton Sea KGRA, which defines the availability of a resource attractive for geothermal energy development and lithium recovery.

The Salton Sea remains a focal point for future development of renewable energy and mineral recovery. The KGRA within the Plan Area offers excellent potential for the development of geothermal energy generation and lithium extraction, both of which are key to advancing renewable energy initiatives and supporting the growing electric vehicle (EV) industry. The Plan Area is located close to transportation infrastructure such as SR-111 and the Union Pacific railroad that may provide access for transporting materials, equipment, and products.

The Plan Area also consists of 10 geothermal power plants in the Salton Sea KGRA in the Imperial Valley. Five of the Imperial Valley facilities – Vulcan, Salton Sea 1, Elmore, Hoch, and Salton Sea 3 – deliver output to a consortium of customers (the City of Riverside, Salt River Project, Sacramento Municipal Utility District, and Imperial Irrigation District [IID]) under long-term portfolio arrangements that enable these customers to spread delivery risk over multiple plants. The remaining five plants deliver output to Southern California Edison (Leathers, Salton Sea 2, and Salton Sea 4), the city of Riverside (Salton Sea 5) and Arizona Public Service (CE Turbo). The combined capacity at Imperial Valley is approximately 345 net megawatts (MW).

1.4 Project Description

The LVSP aims to develop a Specific Plan in the northern portion of the Imperial Valley, specifically along the southeastern part of the Salton Sea, that plans for the continued development of renewable energy infrastructure and related industries including the extraction, processing, and manufacturing use of lithium to support the country's accelerated transition to clean energy.

The LVSP would guide implementation through the integration of a variety of land use designations and zoning codes. Buildout of the LVSP would result in a total approximate maximum buildout of 51,774,849 square feet of development within the 51,622-acre Plan Area (see Figure 2, Proposed Land Use Map). The full development is estimated to generate approximately 40,000 jobs inclusive of 10,000 construction jobs. Implementation of the LVSP would include phased development; expressed by phase, Phase 1 would include up to 24,718,111 square feet of development across approximately 25,521 acres; subsequently, Phases 2 and 3 would include up to 13,534,427 square feet of development across 13,662 acres and 8,759,333 square feet of development over 12,439 acres, respectively.

1.5 Lithium Valley Specific Plan Measures

Program HP-7: Equipment Exhaust Minimization. Within Goal 5: Community Health and Prosperity (HP) of the Lithium Valley Specific Plan, Program HP-7 requires all diesel-fueled off-road equipment shall meet EPA-rated Tier 4 Final engines consistent with Cal. Code Regs., tit. 13 § 2449 et seq. Electric or net-zero emissions equipment is preferred when commercially available and would also meet this requirement.

Policy HP-18 Dust Suppression. Within Goal 5: Community Health and Prosperity (HP) of the Lithium Valley Specific Plan, Policy HP-18 requires To demonstrate compliance with ICAPCD Rules 800-806, all construction activities within the Specific Plan Area must implement the following dust control measures at a minimum:

- Water the exposed area three times per 8-hour workday at a minimum
- Water demolished area two times per 8-hour workday at a minimum
- For on-road fugitive dust, water unpaved roads two times daily at a minimum
- Limit vehicle speeds on unpaved roads to 15 miles per hour
- Sweep paved roads one per month at a minimum
- Pave unpaved roads as soon as feasible during the construction process

Policy HP-19 Paved Roads. The County will ensure that all future development projects within the Plan Area are accessible by a paved road prior to providing a certificate of occupancy.

The following programs and policies would be implemented in the LVSP to enhance transit access and the connectivity of the LVSP with the County:

LVSP Section 5.5 Increased Bus Frequencies. The project tenants or individual employers shall coordinate with IVT to update bus service routes and service times to serve the project. The frequency of Imperial Valley Transit Route 2 will be significantly enhanced. On weekdays, service intervals will be reduced from the current 60-180 minutes to 15-30 minutes, while service internals on weekends will improve to 30-60 minutes. This increase is designed to provide more reliable and convenient transit options for residents and workers.

Dedicated Bus Lane on SR-111. The County, IVT, and project tenants shall coordinate with Caltrans for construction of a new outside lane, exclusive to buses, defined as a dedicated bus lane. This lane would significantly improve the reliability and timeliness of transit services, making public transportation a more attractive option for residents of the County.

Development of Transit Hubs. Transit Facilities, strategically located transit hubs will be established to facilitate seamless connectivity. These hubs will serve as essential nodes within the transit system. Transit or Mobility hub is a central place where multiple modes of transportation converge, designed to facilitate seamless transfers, improve accessibility, and reduce travel time for commuters.

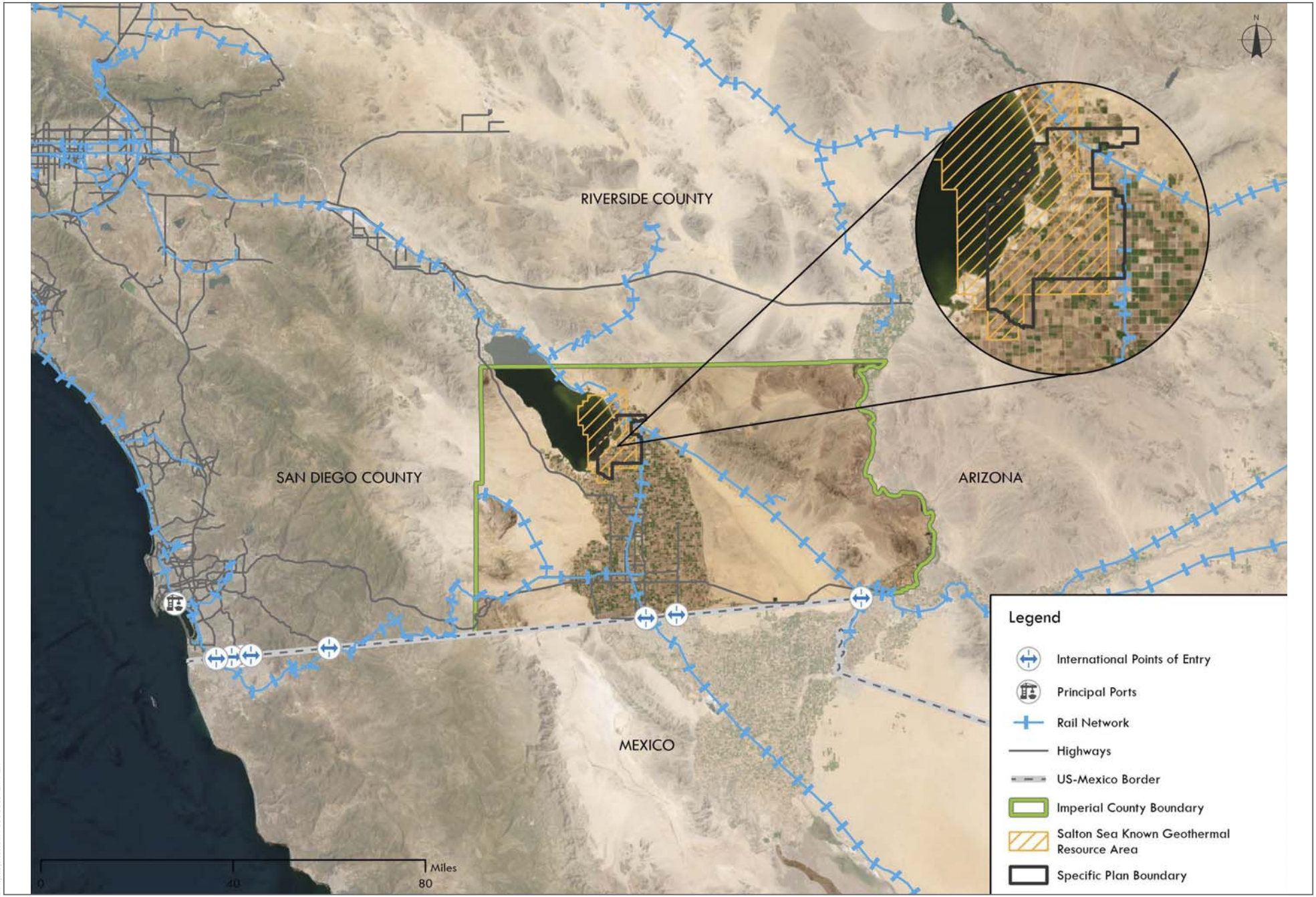
- The locations of the hubs are intended to connect the communities of Niland and Calipatria with the employment hub in the heart of the Plan Area. Implementation of Transit Hub would require coordination with IVT, Imperial County and communities of Niland and Calipatria.
- Each transit hub will include designated spaces for park and ride lots, shared vehicles, and shuttles to employment centers, ensuring efficient transfers and accessibility for commuters. Transit Hubs should be supplemented with additional strategies or programs that provide increased public transit, bicycle, and pedestrian access and improvements. The Transit Hub is anticipated to strengthen the effectiveness of other proposed TDM [Transportation Demand Management] strategies.

Express Bus Connections. The County, IVT, and project tenants shall identify additional express bus routes that may be implemented based on the region's needs and demand and connect to the Plan Area. The express bus route shall consider stops at various locations within the northern communities inclusive of transit hubs and employment centers. This service will link workers to

their jobs, promote rideshare opportunities, provide further travel opportunities to the general public and reduce greenhouse gas emissions. Express routes will also connect Calipatria to SDSU [San Diego State University] Brawley Campus and Imperial Valley College, facilitating access to educational institutions and expanding opportunities for residents.

Employee Shuttle. An employee shuttle shall be implemented once there are three (3) employers with over 200 on-site employees, for a total of over 600 employees in the Plan Area. The employee shuttle would connect the transit hubs at Niland and Calipatria to the employment centers of over 200 on-site employees. This service would link workers to their jobs, promote rideshare opportunities and reduce greenhouse gas emissions.

The employee shuttle or express bus route may be funded and operated by one or more of the following: the newly established Lithium Valley Infrastructure Special District, the participating private employers, or ICTC [Imperial County Transportation Commission]. In collaboration with ICTC and SCAG [Southern California Association of Governments], Imperial County would also enhance transit safety and convenience by upgrading transit stops with shelters and real-time trip information systems. Improvements would be triggered based on operational needs and employment metrics, with a shuttle system introduced to connect employees to transit hubs and commercial destinations.



SOURCE: Imperial County 2025

FIGURE 1
Vicinity Map
Lithium Valley Specific Plan

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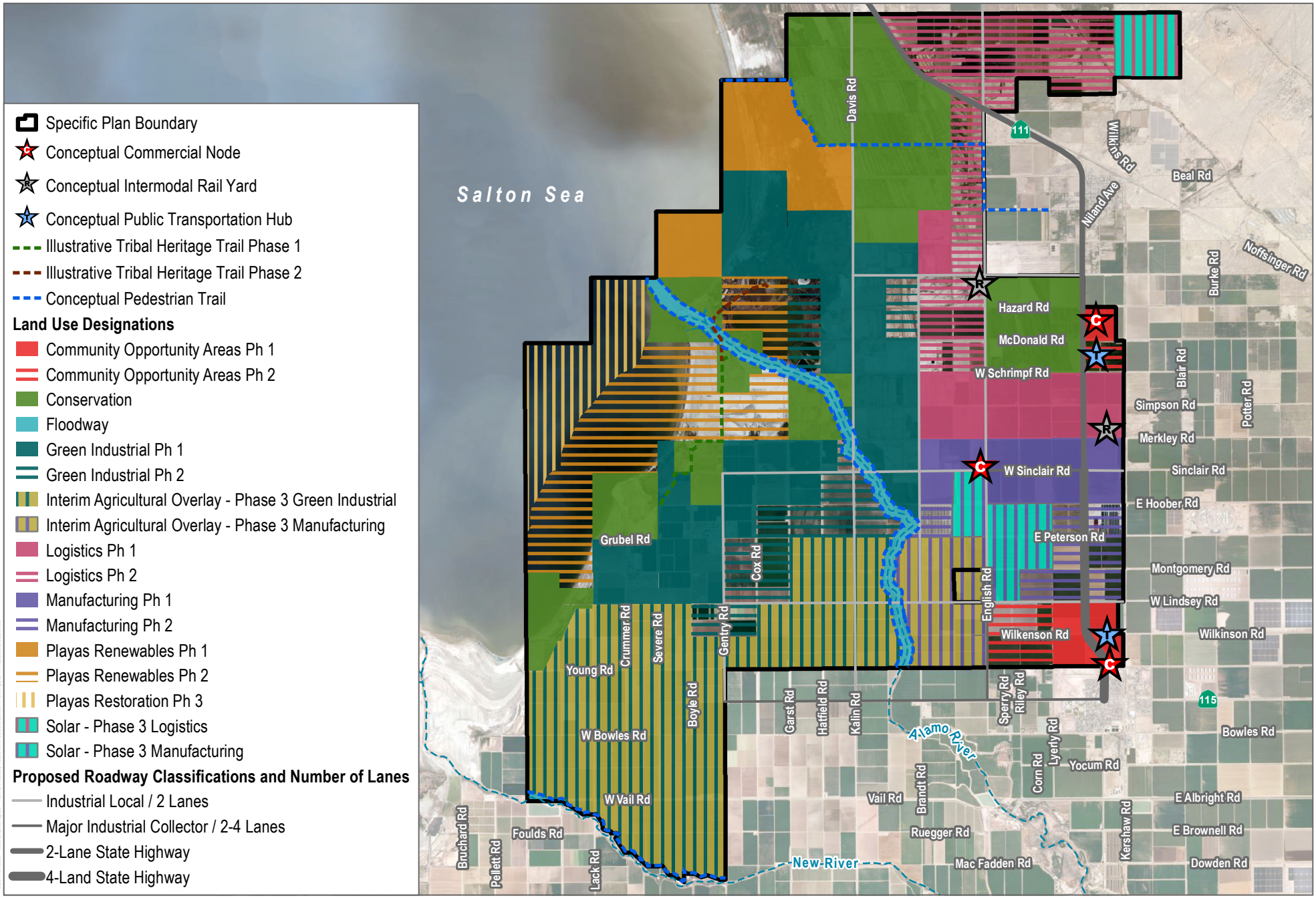

SOURCE: Rick Engineering 2025; Open Street Map; Imperial County; Bing Maps (2022-12-06)

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FIGURE 2

Proposed Land Use Map

Lithium Valley Specific Plan

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2 Air Quality

2.1 Environmental Setting

2.1.1 Climate and Meteorology

The primary factors that determine air quality are the locations of air pollutant sources and the amount of pollutants emitted. Meteorological and topographical conditions, however, are also important. Factors such as wind speed and direction, air temperature gradients and sunlight, and precipitation and humidity interact with physical landscape features to determine the movement and dispersal of air pollutants. The Salton Sea Air Basin (SSAB) air pollution problems are a consequence of the combination of the region's natural characteristics and the prevalence of human activity. Meteorological and topographical factors that affect air quality in the SSAB are described below.

Climate

The SSAB encompasses the entirety of Imperial County and the southeast portion of Riverside County and is generally an arid desert region, with a significant portion located below sea level. A semipermanent high-pressure cell blocks midlatitude storms and causes sunny skies most of the time. The SSAB is characterized by a hot desert climate, experiencing extremely hot summers and mild winters, with minimal rainfall. The SSAB lies in the arid Colorado Desert region of Southern California, which significantly influences its climate patterns. The climate in the SSAB is dominated by high temperatures and low humidity. Average summer temperatures often exceed 100°F, with some areas recording temperatures as high as 120°F. Winters are mild, with average temperatures ranging from 40°F to 70°F. The region receives very little precipitation, typically less than 3 inches annually. The SSAB contains relatively few major emissions sources, but may experience emissions from significant vehicular traffic, particularly near the two international port of entries. Emissions sources consist of geothermal power generation, food processing, plaster manufacturing, and other light industrial facilities. The dry, dusty conditions are exacerbated by the receding shoreline of the Salton Sea, which exposes sediments that are easily picked up by strong winds, contributing to emissions of particulate matter (PM) (PM_{10} [PM with an aerodynamic diameter less than or equal to 10 microns]). This dust pollution is a significant concern for local communities, particularly those that are socioeconomically disadvantaged. Humidity levels in the SSAB are generally low, but the presence of the Salton Sea can create localized areas of higher humidity. However, this effect is limited and does not significantly alter the overall arid conditions. The region experiences occasional strong winds, which can lead to dust storms and further degrade air quality. Overall, the SSAB's climate is characterized by extreme heat, low humidity, and minimal rainfall, with significant air quality challenges due to dust pollution from the exposed lakebed of the Salton Sea (Imperial County 2016).

Salton Sea Conditions

Spanning an area of over 300 square miles, the Salton Sea is California's largest lake and is a major driver or air quality conditions within the SSAB. At its formation, the Sea's water level lied at 195 feet below mean sea level and spanned 520 square miles (Pacific Institute 2025). A declining water supply, due to evaporation and an absence

of tributary inflow, has resulted in an increasingly saline and eutrophic[1] body of water. The agricultural runoff into the Sea from the surrounding region is responsible for its eutrophication, and, as the Sea continues to evaporate and recede, an increasing area of its shores, or playas, are exposed to the open air. The sand found on these beaches can present considerable air quality issues when strong winds pick up the exposed lakebed, creating dust storms carrying PM_{10} into the air (Setmire et al. 2000). Dust storms can reach up to more than 20 miles per hour wind speeds and cause power outages due to infrastructure damage (Valenzuela 2022). Increasing dust and potential toxic airborne emissions may lead to major environmental justice issues for the vulnerable population living nearby through increased asthma and respiratory illness (CNRA 2018a).

2.1.2 Pollutants and Effects

2.1.2.1 Criteria Air Pollutants

Criteria air pollutants are defined as pollutants for which the federal and state governments have established ambient air quality standards, or criteria, for outdoor concentrations to protect public health. The national and California standards have been set, with an adequate margin of safety, at levels above which concentrations could be harmful to human health and welfare. These standards are designed to protect the most sensitive persons from illness or discomfort. Pollutants of concern include ozone (O_3), nitrogen dioxide (NO_2), carbon monoxide (CO), sulfur dioxide (SO_2), PM_{10}, $PM_{2.5}$ (PM with an aerodynamic diameter less than or equal to 2.5 microns), and lead. In California, sulfates, vinyl chloride, hydrogen sulfide, and visibility-reducing particles are also regulated as criteria air pollutants. These pollutants, as well as TACs, are discussed in the following paragraphs.[2]

Ozone. O_3 is a strong-smelling, pale blue, reactive, toxic chemical gas consisting of three oxygen atoms. It is a secondary pollutant formed in the atmosphere by a photochemical process involving the sun's energy and O_3 precursors. These precursors are mainly oxides of nitrogen (NO_x) and volatile organic compounds (VOCs). The maximum effects of precursor emissions on O_3 concentrations usually occur several hours after they are emitted and many miles from the source. Meteorology and terrain play major roles in O_3 formation, and ideal conditions occur during summer and early autumn on days with low wind speeds or stagnant air, warm temperatures, and cloudless skies. O_3 exists in the upper atmosphere O_3 layer (stratospheric O_3) and at the Earth's surface in the troposphere (ground-level O_3).[3] The O_3 that the U.S. Environmental Protection Agency (EPA) and the California Air Resources Board (CARB) regulate as a criteria air pollutant is produced close to the ground level, where people live, exercise, and breathe. Ground-level O_3 is a harmful air pollutant that causes numerous adverse health effects and is thus considered "bad" O_3. Stratospheric, or "good," O_3 occurs naturally in the upper atmosphere, where it reduces the amount of ultraviolet light (i.e., solar radiation) entering the Earth's atmosphere. Without the protection of the beneficial stratospheric O_3 layer, plant and animal life would be seriously harmed.

O_3 in the troposphere causes numerous adverse health effects; short-term exposures (lasting for a few hours) to O_3 at levels typically observed in Southern California can result in breathing pattern changes, reduction of breathing

1 Eutrophic systems, like the Salton Sea, often face accelerated degradation due to nutrient-rich runoff, which typically includes fertilizers and pesticides from agricultural sources. This influx of nutrients creates ideal conditions for algal blooms and excessive plant growth, leading to hypoxic conditions that can harm local aquatic life, disrupting the ecosystem.

2 The descriptions of the criteria air pollutants and associated health effects are based on the U.S. Environmental Protection Agency (EPA) Criteria Air Pollutants (EPA 2025a) and the California Air Resources Board (CARB) Glossary (CARB 2025a).

3 The troposphere is the layer of the Earth's atmosphere nearest to the surface of the Earth. The troposphere extends outward about 5 miles at the poles and about 10 miles at the equator.

capacity, increased susceptibility to infections, inflammation of the lung tissue, and some immunological changes (EPA 2020).

Inhalation of O_3 causes inflammation and irritation of the tissues lining human airways, causing and worsening a variety of symptoms. Exposure to O_3 can reduce the volume of air that the lungs breathe in, thereby causing shortness of breath. O_3 in sufficient doses increases the permeability of lung cells, rendering them more susceptible to toxins and microorganisms. The occurrence and severity of health effects from O_3 exposure vary widely among individuals, even when the dose and the duration of exposure are the same. Research shows adults and children who spend more time outdoors participating in vigorous physical activities are at greater risk from the harmful health effects of O_3 exposure. Although there are relatively few studies on the effects of O_3 on children, the available studies show that children are no more or less likely to suffer harmful effects than adults. However, there are a number of reasons why children may be more susceptible to O_3 and other pollutants. Children and teens spend nearly twice as much time outdoors and engaged in vigorous activities as adults. Children breathe more rapidly than adults and inhale more pollution per pound of their body weight than adults. Also, children are less likely than adults to notice their own symptoms and avoid harmful exposures. Further research may be able to better distinguish between health effects in children and adults. Children, adolescents, and adults who exercise or work outdoors, where O_3 concentrations are the highest, are at the greatest risk of harm from this pollutant (CARB 2025b).

Nitrogen Dioxide. NO_2 is a brownish, highly reactive gas that is present in all urban atmospheres. The major mechanism for the formation of NO_2 in the atmosphere is the oxidation of the primary air pollutant nitric oxide, which is a colorless, odorless gas. NO_x plays a major role, together with VOCs, in the atmospheric reactions that produce O_3. NO_x is formed from fuel combustion under high temperature or pressure. In addition, NO_x is an important precursor to acid rain and may affect both terrestrial and aquatic ecosystems. The two major emissions sources are transportation and stationary fuel combustion sources such as electric utility and industrial boilers. NO_2 can irritate the lungs, cause bronchitis and pneumonia, and lower resistance to respiratory infections.

A large body of health science literature indicates that exposure to NO_2 can induce adverse health effects. The strongest health evidence, and the health basis for the ambient air quality standards for NO_2, results from controlled human exposure studies that show that NO_2 exposure can intensify responses to allergens in allergic asthmatics. In addition, a number of epidemiological studies have demonstrated associations between NO_2 exposure and premature death, cardiopulmonary effects, decreased lung function growth in children, respiratory symptoms, emergency room visits for asthma, and intensified allergic responses. Infants and children are particularly at risk because they have disproportionately higher exposure to NO_2 than adults due to their greater breathing rate for their body weight and their typically greater outdoor exposure duration. Several studies have shown that long-term NO_2 exposure during childhood, the period of rapid lung growth, can lead to smaller lungs at maturity in children with higher levels of exposure compared to children with lower exposure levels. In addition, children with asthma have a greater degree of airway responsiveness compared with adult asthmatics. In adults, the greatest risk is to people who have chronic respiratory diseases, such as asthma and chronic obstructive pulmonary disease (CARB 2025c).

Carbon Monoxide. CO is a colorless, odorless gas formed by the incomplete combustion of hydrocarbon, or fossil fuels. CO is emitted almost exclusively from motor vehicles, power plants, refineries, industrial boilers, ships, aircraft, and trains. In urban areas, automobile exhaust accounts for the majority of CO emissions. CO is a nonreactive air pollutant that dissipates relatively quickly. CO concentrations are influenced by local meteorological conditions—primarily wind speed, topography, and atmospheric stability. CO from motor vehicle exhaust can become locally concentrated when surface-based temperature inversions are combined with calm atmospheric

conditions, which is a typical situation at dusk in urban areas from November to February. The highest levels of CO typically occur during the colder months of the year, when inversion conditions are more frequent.

CO is harmful because it binds to hemoglobin in the blood, reducing the ability of blood to carry oxygen. This interferes with oxygen delivery to the body's organs. The most common effects of CO exposure are fatigue, headaches, confusion and reduced mental alertness, light-headedness, and dizziness due to inadequate oxygen delivery to the brain. For people with cardiovascular disease, short-term CO exposure can further reduce their body's already compromised ability to respond to the increased oxygen demands of exercise, exertion, or stress. Inadequate oxygen delivery to the heart muscle leads to chest pain and decreased exercise tolerance. Unborn babies whose mothers experience high levels of CO exposure during pregnancy are at risk of adverse developmental effects. Unborn babies, infants, elderly people, and people with anemia or with a history of heart or respiratory disease are most likely to experience health effects with exposure to elevated levels of CO (CARB 2025d).

Sulfur Dioxide. SO_2 is a colorless, pungent gas formed primarily from incomplete combustion of sulfur-containing fossil fuels. The main sources of SO_2 are coal and oil used in fossil fuel power plants and industries; as such, the highest levels of SO_2 are generally found near large industrial complexes. In recent years, SO_2 concentrations have been reduced by the increasingly stringent controls placed on stationary source emissions of SO_2 and limits on the sulfur content of fuels.

Controlled human exposure and epidemiological studies show that children and adults with asthma are more likely to experience adverse responses with SO_2 exposure, compared with the nonasthmatic population. Effects at levels near the 1-hour standard are those of asthma exacerbation, including bronchoconstriction accompanied by symptoms of respiratory irritation such as wheezing, shortness of breath, and chest tightness, especially during exercise or physical activity. Also, exposure at elevated levels of SO_2 (above 1 part per million [ppm]) results in increased incidence of pulmonary symptoms and disease, decreased pulmonary function, and increased risk of death. Older people and people with cardiovascular disease or chronic lung disease (such as bronchitis or emphysema) are most likely to experience these adverse effects (CARB 2025e).

SO_2 is of concern both because it is a direct respiratory irritant and because it contributes to the formation of sulfate and sulfuric acid in PM (NRC 2005). People with asthma are of particular concern, both because they have increased baseline airflow resistance and because their SO_2-induced increase in airflow resistance is greater than in healthy people, and it increases with the severity of their asthma (NRC 2005). SO_2 is thought to induce airway constriction via neural reflexes involving irritant receptors in the airways (NRC 2005).

Particulate Matter. PM pollution consists of very small liquid and solid particles floating in the air, which can include smoke, soot, dust, salts, acids, and metals. PM can form when gases emitted from industries and motor vehicles undergo chemical reactions in the atmosphere. $PM_{2.5}$ and PM_{10} represent fractions of PM. Coarse PM (PM_{10}) consists of PM that is 10 microns or less in diameter, which is about 1/7 the thickness of a human hair. Major sources of PM_{10} include crushing or grinding operations; dust stirred up by vehicles traveling on roads; wood-burning stoves and fireplaces; dust from construction, landfills, and agriculture; wildfires and brush/waste burning; industrial sources; windblown dust from open lands; and atmospheric chemical and photochemical reactions. Fine PM ($PM_{2.5}$) consists of PM that is 2.5 microns or less in diameter, which is roughly 1/28 the diameter of a human hair. $PM_{2.5}$ results from fuel combustion (e.g., from motor vehicles and power generation and industrial facilities), residential fireplaces, and woodstoves. In addition, $PM_{2.5}$ can be formed in the atmosphere from gases such as sulfur oxides (SO_x), NO_x, and VOCs.

When inhaled, these tiny particles can penetrate the human respiratory system's natural defenses and damage the respiratory tract. $PM_{2.5}$ and PM_{10} can increase the number and severity of asthma attacks, cause or aggravate bronchitis and other lung diseases, and reduce the body's ability to fight infections. Very small particles of substances such as lead, sulfates, and nitrates can cause lung damage directly or be absorbed into the bloodstream, causing damage elsewhere in the body. Additionally, these substances can transport adsorbed gases such as chlorides or ammonium into the lungs, also causing injury. Whereas PM_{10} tends to collect in the upper portion of the respiratory system, $PM_{2.5}$ is so tiny that it can penetrate deeper into the lungs and damage lung tissue. Suspended particulates also damage and discolor surfaces on which they settle and produce haze and reduce regional visibility.

Several adverse health effects have been associated with exposure to both $PM_{2.5}$ and PM_{10}. For $PM_{2.5}$, short-term exposures (up to 24 hours duration) have been associated with premature death, increased hospital admissions for heart or lung causes, acute and chronic bronchitis, asthma attacks, emergency room visits, respiratory symptoms, and restricted activity days. These adverse health effects have been reported primarily in infants, children, and older adults with preexisting heart or lung diseases. In addition, of all of the common air pollutants, $PM_{2.5}$ is associated with the greatest proportion of adverse health effects related to air pollution, both in the United States and worldwide based on the World Health Organization's Global Burden of Disease Project. Short-term exposures to PM_{10} have been associated primarily with worsening of respiratory diseases, including asthma and chronic obstructive pulmonary disease, leading to hospitalization and emergency department visits (CARB 2025f).

Long-term exposure (months to years) to $PM_{2.5}$ has been linked to premature death, particularly in people who have chronic heart or lung diseases, and reduced lung function growth in children. The effects of long-term exposure to PM_{10} are less clear, although several studies suggest a link between long-term PM_{10} exposure and respiratory death. The International Agency for Research on Cancer published a review in 2015 that concluded that PM in outdoor air pollution causes lung cancer (CARB 2025f).

Lead. Lead in the atmosphere occurs as PM. Sources of lead include leaded gasoline; the manufacturing of batteries, paints, ink, ceramics, and ammunition; and secondary lead smelters. Prior to 1978, mobile emissions were the primary source of atmospheric lead. Between 1978 and 1987, the phaseout of leaded gasoline reduced the overall inventory of airborne lead by nearly 95%. With the phaseout of leaded gasoline, secondary lead smelters, battery recycling, and manufacturing facilities are becoming lead-emissions sources of greater concern. As gasoline no longer contains lead, the project is not anticipated to result in impacts related to lead; therefore, it is not discussed in this analysis.

Prolonged exposure to atmospheric lead poses a serious threat to human health. Health effects associated with exposure to lead include gastrointestinal disturbances, anemia, kidney disease, and in severe cases, neuromuscular and neurological dysfunction. Of particular concern are low-level lead exposures during infancy and childhood. Such exposures are associated with decrements in neurobehavioral performance, including IQ performance, psychomotor performance, reaction time, and growth. Children are highly susceptible to the effects of lead.

Sulfates. Sulfates are the fully oxidized form of sulfur, which typically occur in combination with metals or hydrogen ions. Sulfates are produced from reactions of SO_2 in the atmosphere and can result in respiratory impairment, as well as reduced visibility.

Vinyl Chloride. Vinyl chloride is a colorless gas with a mild, sweet odor, which has been detected near landfills, sewage plants, and hazardous waste sites, due to the microbial breakdown of chlorinated solvents. Short-term exposure to high levels of vinyl chloride in the air can cause nervous system effects, such as dizziness, drowsiness, and headaches. Long-term exposure through inhalation can cause liver damage, including liver cancer.

Hydrogen Sulfide. Hydrogen sulfide is a colorless and flammable gas that has a characteristic odor of rotten eggs. Sources of hydrogen sulfide include geothermal power plants, petroleum refineries, sewers, and sewage treatment plants. Exposure to hydrogen sulfide can result in nuisance odors, as well as headaches and breathing difficulties at higher concentrations. Hydrogen sulfide is formed by organic decay in the absence of oxygen at the bottom of the Salton Sea. Hydrogen sulfide emissions from the Salton Sea are more intense and frequent during warmer months when decaying organic matter releases elevated concentrations of the gas.

Visibility-Reducing Particles. Visibility-reducing particles are any particles in the air that obstruct the range of visibility. Effects of reduced visibility can include obscuring the viewshed of natural scenery, reducing airport safety, and discouraging tourism. Sources of visibility-reducing particles are the same as for $PM_{2.5}$.

Volatile Organic Compounds. Hydrocarbons are organic gases that are formed from hydrogen and carbon and sometimes other elements. Hydrocarbons that contribute to formation of O_3 are referred to and regulated as VOCs (also referred to as reactive organic gases). Combustion engine exhaust, oil refineries, and fossil-fueled power plants are sources of hydrocarbons. Other sources of hydrocarbons include evaporation from petroleum fuels, solvents, dry cleaning solutions, and paint.

The primary health effects of VOCs result from the formation of O_3 and its related health effects. High levels of VOCs in the atmosphere can interfere with oxygen intake by reducing the amount of available oxygen through displacement. Carcinogenic forms of hydrocarbons, such as benzene, are considered TACs. There are no separate ambient air quality standards for VOCs as a group.

2.1.2.2 Noncriteria Air Pollutants

Toxic Air Contaminants. A substance is considered toxic if it has the potential to cause adverse health effects in humans, including increasing the risk of cancer upon exposure, or acute and/or chronic noncancer health effects. A toxic substance released into the air is considered a TAC. TACs are identified by federal and state agencies based on a review of available scientific evidence. In California, TACs are identified through a two-step process that was established in 1983 under the Toxic Air Contaminant Identification and Control Act. This two-step process of risk identification and risk management and reduction was designed to protect residents from the health effects of toxic substances in the air. In addition, the California Air Toxics "Hot Spots" Information and Assessment Act, Assembly Bill (AB) 2588, was enacted by the California State Legislature in 1987 to address public concern over the release of TACs into the atmosphere. The law requires facilities emitting toxic substances to provide local air pollution control districts with information that will allow an assessment of the air toxics problem, identification of air toxics emissions sources, location of resulting hotspots, notification of the public exposed to significant risk, and development of effective strategies to reduce potential risks to the public over 5 years.

Examples include certain aromatic and chlorinated hydrocarbons, certain metals, and asbestos. TACs are generated by a number of sources, including stationary sources, such as dry cleaners, gas stations, combustion sources, and laboratories; mobile sources, such as automobiles; and area sources, such as landfills. Adverse health effects associated with exposure to TACs may include carcinogenic (i.e., cancer-causing) and noncarcinogenic

effects. Noncarcinogenic effects typically affect one or more target organ systems and may be experienced on either short-term (acute) or long-term (chronic) exposure to a given TAC.

CARB classified "particulate emissions from diesel-fueled engines" (i.e., diesel particulate matter [DPM]) (17 CCR 93000) as a TAC in August 1998. DPM is part of a complex mixture that makes up diesel exhaust. Diesel exhaust is composed of two phases, gas and particle, both of which contribute to health risks. More than 90% of DPM is less than 1 micrometer in diameter (about 1/70 the diameter of a human hair), and thus is a subset of $PM_{2.5}$ (CARB 2025f). DPM is typically composed of carbon particles ("soot," also called black carbon) and numerous organic compounds, including over 40 known cancer-causing organic substances. Examples of these chemicals include polycyclic aromatic hydrocarbons, benzene, formaldehyde, acetaldehyde, acrolein, and 1,3-butadiene (CARB 2025f). DPM is emitted from a broad range of diesel engines: on-road diesel engines, including trucks, buses, and cars, and off-road diesel engines, including locomotives, marine vessels, and heavy-duty construction equipment, among others. Approximately 70% of all airborne cancer risk in California is associated with DPM (CARB 2000). To reduce the cancer risk associated with DPM, CARB adopted a diesel risk reduction plan in 2000 (CARB 2000). Because it is part of $PM_{2.5}$, DPM also contributes to the same noncancer health effects as $PM_{2.5}$ exposure. These effects include premature death; hospitalizations and emergency department visits for exacerbated chronic heart and lung disease, including asthma; increased respiratory symptoms; and decreased lung function in children. Several studies suggest that exposure to DPM may also facilitate development of new allergies (CARB 2025f). Those most vulnerable to noncancer health effects are children, whose lungs are still developing, and older people, who often have chronic health problems.

Odorous Compounds. Odors are generally regarded as an annoyance rather than a health hazard. Manifestations of a person's reaction to odors can range from psychological (e.g., irritation, anger, or anxiety) to physiological (e.g., circulatory and respiratory effects, nausea, vomiting, and headache). The ability to detect odors varies considerably among the population and overall is quite subjective. People may have different reactions to the same odor. An odor that is offensive to one person may be perfectly acceptable to another (e.g., coffee roaster). An unfamiliar odor is more easily detected and is more likely to cause complaints than a familiar one. In a phenomenon known as odor fatigue, a person can become desensitized to almost any odor, and recognition may only occur with an alteration in the intensity. The occurrence and severity of odor impacts depend on the nature, frequency, and intensity of the source; wind speed and direction; and the sensitivity of receptors.

Valley Fever. Coccidioidomycosis, more commonly known as "valley fever," is an infection caused by inhalation of the spores of the *Coccidioides immitis* fungus, which grows in the soils of the southwestern United States. The fungus is very prevalent in the soils of California's San Joaquin Valley, particularly in Kern County. The ecologic factors that appear to be most conducive to survival and replication of the spores are high summer temperatures, mild winters, sparse rainfall, and alkaline, sandy soils.

Imperial County is not considered a highly endemic county (i.e., highly endemic meaning more than 20 cases annually of valley fever per 100,000 people) based on the incidence rates reported through 2023. The latest report from the California Department of Public Health indicates that Imperial County had 21 cases in 2023, or 11.7 cases per 100,000 people (CDPH 2024a). The California counties with the highest incidences for valley fever include Kern (330.9 per 100,000), Kings (176.6 per 100,000), Tulare (94.7 per 100,000), San Luis Obispo (84.7 per 100,000), Fresno (55.8 per 100,000), and San Joaquin (44.4 per 100,000), which together accounted for 49% of the reported cases in 2023 (CDPH 2024a).

Playa Dust. Dust from the Salton Sea's exposed playa beds presents a environmental and public health concern in the region, including the Plan Area. The recession of the Salton Sea's water levels has exacerbated the issue, as more playa dust has been exposed and susceptible to becoming airborne. The main concern with the exposed playa's dust composition is the degree to which contaminants like salt, pesticides, selenium, and other metals in the soil and sediment will also be present in the playa dust (Vogl and Henry 2002; Frie et al. 2017). Elevated levels of these metals have been observed in Salton Sea soil sediments, and their accumulation in playa environments can increase the toxicity of PM and exacerbate related health risks. (Frie et al. 2017; Reheis et al. 2009; Breit et al. 2009).

To evaluate this health risk, the composition of playa dust and sediment and whether it is unique from native desert material has been the focus of multiple investigations (Vogl and Henry 2002; Xu et al. 2016; Frie et al. 2017, 2019; Biddle et al. 2023) as well as the IID Salton Sea Air Quality Mitigation Program (IID 2016). Specifically, IID has collected numerous samples of PM_{10} across seven playa and six desert sites and analyzed them for a suite of 51 elemental compounds.

Findings of the IID research indicate that concentrations of toxic metals are either below detection limits or similar to background soil conditions in the surrounding desert (IID 2024). The playa surfaces, originally dried Salton Sea sediment, are now vulnerable to wind erosion and spreading. Over time, they have formed salt crusts due to the evaporation of shallow groundwater, the creation of evaporite minerals, and the deposition of desert sediment by wind and water. These factors likely explain the discrepancy between the toxic elements observed in Salton Sea soil sediment and the lack thereof observed in playa and desert PM and soil samples.

Current research does not support the idea that playa dust (PM_{10}) is exceptionally high in toxic metals (IID 2024). However, the playa is an anthropogenic source of atmospheric dust, expected to increase in area and expose previously submerged Salton Sea sediment with potentially elevated contaminant levels. As the playa area expands, some of these sediments may be exposed, but deeper portions of the Salton Sea, which contain more concentrated contaminants, are expected to remain submerged (Anderson et al. 2008; Vogl and Henry 2002). As described in Section 2.1.1, exposures to PM_{10} and $PM_{2.5}$ have been associated with premature death, increased hospital admissions for heart or lung causes, worsening of respiratory diseases including asthma and chronic obstructive pulmonary disease, acute and chronic bronchitis, asthma attacks, and emergency room visits.

2.1.3 Sensitive Receptors

Some land uses are considered more sensitive to changes in air quality than others, depending on the population groups and the activities involved. People most likely to be affected by air pollution include children, the elderly, athletes, and people with cardiovascular and chronic respiratory diseases. Facilities and structures where these air-pollution-sensitive people live or spend considerable amounts of time are known as sensitive receptors. Land uses where air-pollution-sensitive individuals are most likely to spend time include schools and schoolyards, parks and playgrounds, daycare centers, nursing homes, hospitals, and residential communities (sensitive sites or sensitive land uses) (CARB 2005). The ICAPCD does not provide a definition for sensitive receptors; however, nearby air districts have established such definitions that are consistent with each other. For example, the Mojave Desert Air Quality Management District identifies sensitive receptors as residences, schools, daycare centers, playgrounds, and medical facilities. In addition, the South Coast Air Quality Management District (SCAQMD) identifies sensitive receptors as residences, schools, playgrounds, childcare centers, long-term healthcare facilities, rehabilitation centers, convalescent centers, and retirement homes (SCAQMD 1993).

The nearest sensitive receptors are existing single-family residences, located both within and adjacent to the project's boundaries and under the jurisdiction of the County and the City of Calipatria. These existing sensitive receptors represent the nearest land uses to the project. Figure 3, shows a map of nearby existing receptors within and adjacent to the project's boundaries.

The project itself would create sensitive receptors in the form of new temporary housing and permanent housing. CARB identifies sources of air pollution that are of primary concern to the siting of new sensitive receptors. Those sources include freeways, high traffic roadways, distribution centers, and large stationary sources, among others (CARB 2005). The northern boundary of the Plan Area extends to include the railroad corridor, whereas the eastern boundary is marked by major transportation corridors, including SR-111 and Gentry/Forrester Road, with close proximity to the north–south railroad line that runs parallel to SR-111. The existing roadway segments currently operate below the roadway capacity (RICK Engineering 2025).

2.1.4 Background Conditions

CalEnviroScreen, Senate Bill 535, Assembly Bill 1550, and Assembly Bill 617

CalEnviroScreen is a mapping tool that helps identify California communities that are most affected by many sources of pollution, where people are often especially vulnerable to pollution's effects. CalEnviroScreen ranks census tracts in California based on potential exposures to pollutants, adverse environmental conditions, socioeconomic factors, and the prevalence of certain health conditions. Data used in the CalEnviroScreen model come from national and state sources.

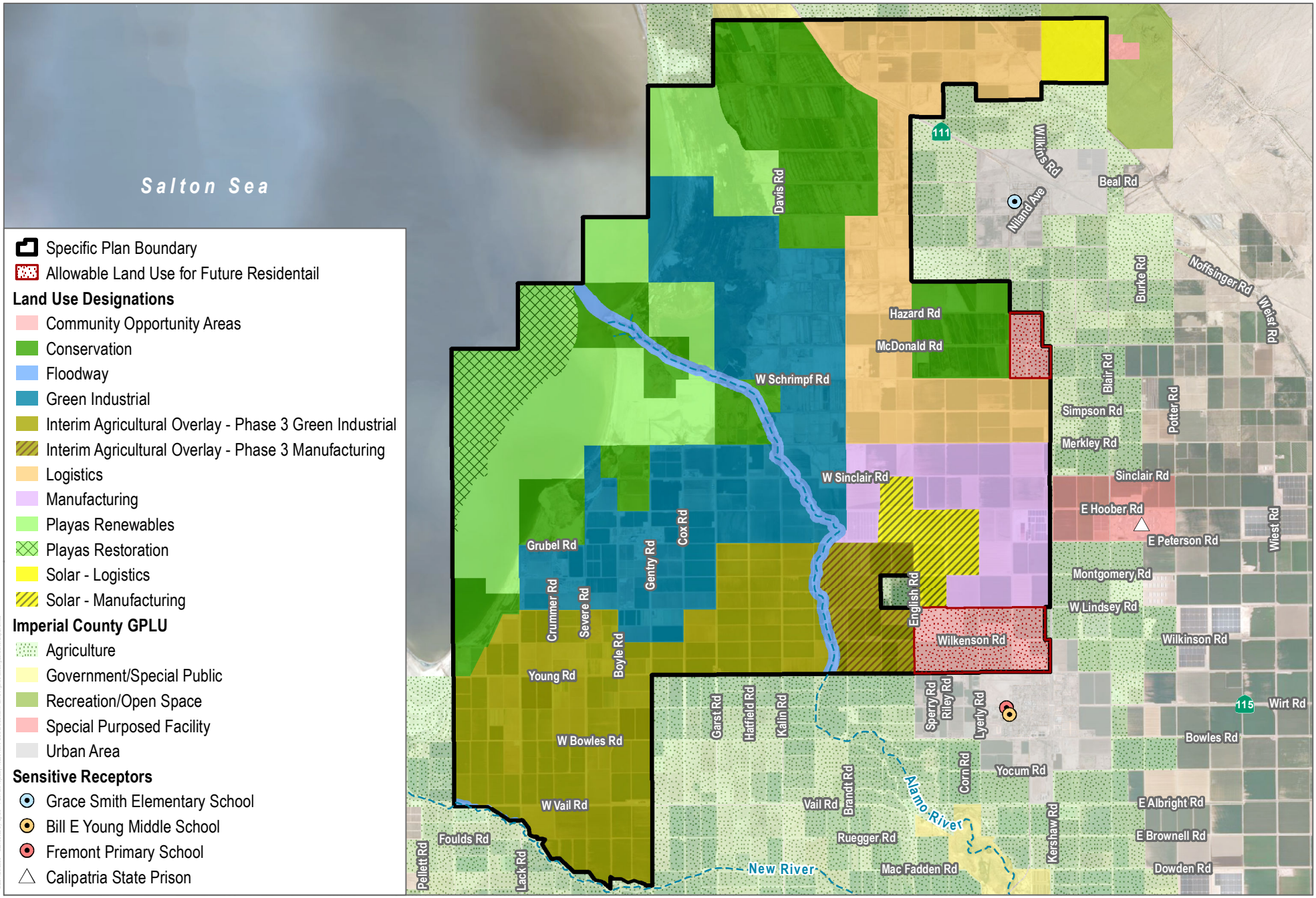
The Plan Area is located within an area that has been designated as a disadvantaged community pursuant to Senate Bill (SB) 535 (OEHHA 2022a), and as a Low-Income Community pursuant to AB 1550 (CARB 2025g). Furthermore, the Plan Area is located in an area designated for a Community Air Protection Program pursuant to AB 617 with portions located within the Westmorland, Brawley, and Calipatria-North End Phase 1 AB 617 Community (CARB 2025h). As such, the community must implement a Community Emissions Reduction Program (CERP) to address its air quality issues, including the burden of high cumulative exposure to pollutants.

The project site achieves a score of 82 on CalEnviroScreen (OEHHA 2021). The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state. Notably, the tract in which the project site is located is in the 91st percentile of pollution burden for 'pesticides,' 93rd percentile for 'hazardous waste,' and 100th percentile for 'impaired water' (OEHHA 2021), among other pollution categories.

Healthy Places Index

The Healthy Places Index (HPI) is a project of the Public Health Alliance of Southern California. The HPI is a powerful and easy-to-use data and policy platform created to advance health equity through open and accessible data. Neighborhood-by-neighborhood, the HPI maps data on social conditions that drive health—like education, job opportunities, clean air and water, and other indicators that are positively associated with life expectancy at birth. Community leaders, policymakers, academics, and other stakeholders use the HPI to compare the health and well-being of communities, identify health inequities and quantify the factors that shape health.

The project site has an HPI score of 3.7 (California Healthy Places Index 2022). The maximum HPI score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.



SOURCE: Imperial County; Open Street Map; Bing Maps (2022-12-06)

DUDEK

FIGURE 4.3-1

Existing Sensitive Receptors

Lithium Valley Specific Plan

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2.2 Regulatory Setting

2.2.1 Federal Regulations

2.2.1.1 Criteria Air Pollutants

The federal Clean Air Act, passed in 1970 and last amended in 1990, forms the basis for the national air pollution control effort. EPA is responsible for implementing most aspects of the Clean Air Act, including setting National Ambient Air Quality Standards (NAAQS) for major air pollutants; setting hazardous air pollutant (HAP) standards; approving state attainment plans; setting motor vehicle emission standards; issuing stationary source emission standards and permits; and establishing acid rain control measures, stratospheric O_3 protection measures, and enforcement provisions. Under the Clean Air Act, NAAQS are established for the following criteria pollutants: O_3, CO, NO_2, SO_2, PM_{10}, $PM_{2.5}$, and lead.

The NAAQS describe acceptable air quality conditions designed to protect the health and welfare of the citizens of the nation. The NAAQS (other than for O_3, NO_2, SO_2, PM_{10}, $PM_{2.5}$, and those based on annual averages or arithmetic mean) are not to be exceeded more than once per year. NAAQS for O_3, NO_2, SO_2, PM_{10}, and $PM_{2.5}$ are based on statistical calculations over 1- to 3-year periods, depending on the pollutant. The Clean Air Act requires the EPA to reassess the NAAQS at least every 5 years to determine whether adopted standards are adequate to protect public health based on current scientific evidence. States with areas that exceed the NAAQS must prepare a State Implementation Plan (SIP) that demonstrates how those areas will attain the NAAQS within mandated time frames.

2.2.1.2 Hazardous Air Pollutants

The 1977 federal Clean Air Act amendments required the EPA to identify national emission standards for HAPs to protect public health and welfare. HAPs include certain volatile organic chemicals, pesticides, herbicides, and radionuclides that present a tangible hazard, based on scientific studies of exposure to humans and other mammals. Under the 1990 federal Clean Air Act amendments, which expanded the control program for HAPs, 187 substances and chemical families were identified as HAPs.

2.2.2 State Regulations

2.2.2.1 Criteria Air Pollutants

The federal Clean Air Act delegates the regulation of air pollution control and the enforcement of the NAAQS to the states. In California, the task of air quality management and regulation has been legislatively granted to CARB, with subsidiary responsibilities assigned to air quality management districts and air pollution control districts at the regional and county levels. CARB, which became part of the California Environmental Protection Agency in 1991, is responsible for ensuring implementation of the California Clean Air Act of 1988, responding to the federal Clean Air Act, and regulating emissions from motor vehicles and consumer products.

CARB has established California Ambient Air Quality Standards (CAAQS), which are generally more restrictive than the NAAQS. As stated previously, an ambient air quality standard defines the maximum amount of a pollutant averaged over a specified period of time that can be present in outdoor air without harm to the public's health. For each pollutant, concentrations must be below the relevant CAAQS before a basin can attain the corresponding

CAAQS. Air quality is considered "in attainment" if pollutant levels are continuously below the CAAQS and violate the standards no more than once each year. The CAAQS for O_3, CO, SO_2 (1-hour and 24-hour), NO_2, PM_{10}, and $PM_{2.5}$ and visibility-reducing particles are values that are not to be exceeded.

California air districts have based their thresholds of significance for CEQA purposes on the levels that scientific and factual data demonstrate that the air basin can accommodate without affecting the attainment date for the NAAQS or CAAQS. Because an ambient air quality standard is based on maximum pollutant levels in outdoor air that would not harm the public's health, and air district thresholds pertain to attainment of the ambient air quality standard, this means that the thresholds established by air districts are also protective of human health. The NAAQS and CAAQS are presented in Table 2-1.

Table 2-1. Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards[a]	National Standards[b]	
		Concentration[c]	Primary[c,d]	Secondary[c,e]
O_3	1 hour	0.09 ppm (180 µg/m³)	—	Same as primary standard[f]
	8 hours	0.070 ppm (137 µg/m³)	0.070 ppm (137 µg/m³)[f]	
NO_2[g]	1 hour	0.18 ppm (339 µg/m³)	0.100 ppm (188 µg/m³)	Same as primary standard
	Annual arithmetic mean	0.030 ppm (57 µg/m³)	0.053 ppm (100 µg/m³)	
CO	1 hour	20 ppm (23 mg/m³)	35 ppm (40 mg/m³)	None
	8 hours	9.0 ppm (10 mg/m³)	9 ppm (10 mg/m³)	
SO_2[h]	1 hour	0.25 ppm (655 µg/m³)	0.075 ppm (196 µg/m³)	—
	3 hours	—	—	0.5 ppm (1,300 µg/m³)
	24 hours	0.04 ppm (105 µg/m³)	0.14 ppm (for certain areas)[g]	—
	Annual	—	0.030 ppm (for certain areas)[g]	—
PM_{10}[i]	24 hours	50 µg/m³	150 µg/m³	Same as primary standard
	Annual arithmetic mean	20 µg/m³	—	
$PM_{2.5}$[i]	24 hours	—	35 µg/m³	Same as primary standard
	Annual arithmetic mean	12 µg/m³	9.0 µg/m³	15.0 µg/m³
Lead[j,k]	30-day average	1.5 µg/m³	—	—
	Calendar quarter	—	1.5 µg/m³ (for certain areas)[k]	Same as primary standard
	Rolling 3-month average	—	0.15 µg/m³	
Hydrogen sulfide	1 hour	0.03 ppm (42 µg/m³)	—	—

Table 2-1. Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards[a]	National Standards[b]	
		Concentration[c]	Primary[c,d]	Secondary[c,e]
Vinyl chloride[j]	24 hours	0.01 ppm (26 µg/m³)	—	—
Sulfates	24 hours	25 µg/m³	—	—
Visibility-reducing particles	8 hours (10:00 a.m. to 6:00 p.m. PST)	Insufficient amount to produce an extinction coefficient of 0.23 per kilometer due to the number of particles when the relative humidity is less than 70%	—	—

Source: CARB 2024.

Notes: O_3 = ozone; ppm = parts per million by volume; µg/m³ = micrograms per cubic meter; NO_2 = nitrogen dioxide; CO = carbon monoxide; mg/m³= milligrams per cubic meter; SO_2 = sulfur dioxide; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter; PST = Pacific Standard Time.

a California standards for O_3, CO, SO_2 (1-hour and 24-hour), NO_2, suspended particulate matter (PM_{10}, $PM_{2.5}$), and visibility-reducing particles are values that are not to be exceeded. All others are not to be equaled or exceeded. CAAQS are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

b National standards (other than O_3, NO_2, SO_2, particulate matter, and those based on annual averages or annual arithmetic mean) are not to be exceeded more than once per year. The O_3 standard is attained when the fourth-highest 8-hour concentration measured at each site in a year, averaged over 3 years, is equal to or less than the standard. For PM_{10}, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m³ is equal to or less than 1. For $PM_{2.5}$, the 24-hour standard is attained when 98% of the daily concentrations, averaged over 3 years, are equal to or less than the standard.

c Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based on a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.

d National primary standards: The levels of air quality necessary, with an adequate margin of safety, to protect the public health.

e National secondary standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

f On October 1, 2015, the national 8-hour O_3 primary and secondary standards were lowered from 0.075 to 0.070 ppm.

g To attain the national 1-hour standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 parts per billion (ppb). Note that the national 1-hour standard is in units of ppb. California standards are in units of ppm. To directly compare the national 1-hour standard to the California standards, the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.

h On June 2, 2010, a new 1-hour SO_2 standard was established, and the existing 24-hour and annual primary standards were revoked. To attain the national 1-hour standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO_2 national standards (24-hour and annual) remain in effect until 1 year after an area is designated for the 2010 standard, except that in areas designated nonattainment of the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.

l On February 7, 2024, the national annual $PM_{2.5}$ primary standard was lowered from 12.0 µg/m³ to 9.0 µg/m³. The existing national 24-hour $PM_{2.5}$ standards (primary and secondary) were retained at 35 µg/m³, as was the annual secondary standard of 15 µg/m³. The existing 24-hour PM_{10} standards (primary and secondary) of 150 µg/m³ were also retained. The form of the annual primary and secondary standards is the annual mean averaged over 3 years.

j CARB has identified lead and vinyl chloride as TACs with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

k The national standard for lead was revised on October 15, 2008, to a rolling 3-month average. The 1978 lead standard (1.5-µg/m³ as a quarterly average) remains in effect until 1 year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.

Local Ambient Air Quality

CARB, air districts, and other agencies monitor ambient air quality at approximately 250 air quality monitoring stations across the state. ICAPCD monitors local ambient air quality in the vicinity of the Plan Area. Air quality monitoring stations usually measure pollutant concentrations 10 feet above ground level; therefore, air quality is often referred to in terms of ground-level concentrations. The most recent background ambient air quality data from 2022 to 2024 are presented in Table 2-2. Local ambient air quality data was collected from four different sites to comprise the concentrations below. For concentrations of O_3 and PM_{10}, the Niland monitoring station, located within the Plan Area, was used. For concentrations of NO_2, data from the El Centro monitoring station, located approximately 21 miles from the Plan Area, was used. Data from the Brawley monitoring station, located approximately 9 miles from the Plan Area, was used for concentrations of $PM_{2.5}$. For CO and SO_2, data from the Calexico High School monitoring station, located approximately 30 miles from the Plan Area, was used. The data collected at these stations are considered representative of the air quality experienced in the Plan Area. The number of days exceeding the ambient air quality standards is also shown in Table 2-2.

Table 2-2. Local Ambient Air Quality Data

Averaging Time	Unit	Agency/ Method	Ambient Air Quality Standard	Measured Concentration by Year			Exceedances by Year		
				2022	2023	2024	2022	2023	2024
Ozone (O_3) (Niland)									
Maximum 1-hour concentration	ppm	California	0.12	0.070	0.082	0.084	0	0	0
Maximum 8-hour concentration	ppm	California	0.070	0.062	0.077	0.073	2	0	6
		National	0.070	0.062	0.077	0.073	2	0	5
Nitrogen Dioxide (NO_2) (El Centro)									
Maximum 1-hour concentration	ppm	California	0.18	0.051	0.050	0.072	0	0	0
		National	0.100	0.051	0.051	0.072	0	0	0
Annual concentration	ppm	California	0.030	ND	ND	ND	—	—	—
		National	0.053	ND	ND	ND	—	—	—
Carbon Monoxide (CO) (Calexico High School)									
Maximum 1-hour concentration	ppm	California	20	ND	ND	ND	ND	ND	ND
		National	35	5.0	3.5	ND	0	0	0
Maximum 8-hour concentration	ppm	California	9.0	ND	ND	ND	ND	ND	ND
		National	9	3.6	2.7	ND	0	0	0
Sulfur Dioxide (SO_2) (Calexico High School)									
Maximum 1-hour concentration	ppm	National	0.075	0.009	0.018	0.008	0	0	0

Table 2-2. Local Ambient Air Quality Data

Averaging Time	Unit	Agency/ Method	Ambient Air Quality Standard	Measured Concentration by Year			Exceedances by Year		
				2022	2023	2024	2022	2023	2024
Maximum 24-hour concentration	ppm	National	0.14	0.002	0.002	0.002	0	0	0
Annual concentration	ppm	National	0.030	0.0004	0.0003	0.0004	—	—	—
Coarse Particulate Matter (PM_{10}) (Niland)[a]									
Maximum 24-hour concentration	µg/m³	California	50	474.7	488.6	463.9	111.7 (108)	89.0 (85)	83.0 (81)
		National	150	470.2	491.9	461.1	9.2 (9)	13.5 (13)	2.1 (2)
Annual concentration	µg/m³	California	20	48.6	46.0	39.9	—	—	—
Fine Particulate Matter ($PM_{2.5}$) (Brawley-Main Street)[a]									
Maximum 24-hour concentration	µg/m³	National	35	43.2	64.5	23.3	5.0 (5)	3.1 (3)	0.0 (0)
Annual concentration	µg/m³	California	12	ND	8.6	7.7	—	—	—
		National	12.0	8.6	8.5	7.6	—	—	—
Hydrogen Sulfide (H_2S) (Mecca-65705 Johnson Street)									
Maximum 1-hour concentration	ppm	California	0.03	0.073	0.052	0.131	1	1	11

Sources: CARB 2025i; EPA 2025b. Monitoring station represented for each source noted in parentheses following the pollutant monitored.

Notes: ppm = parts per million by volume; — = not available; µg/m³ = micrograms per cubic meter; ND = insufficient data available to determine the value.

Niland-English Road Station is located at 7711 English Road, Niland, California.

El Centro-9th Street Station is located at 150 9th Street, El Centro, California.

Calexico High School Station is located at 1029 Ethel Street, Calexico, California.

Brawley-Main Street Station is located at 220 Main Street, Suite 204, Brawley, California.

Mecca-65705 Johnson Street Station is located at 65705 Johnson Street, Mecca, California 92254

Data taken from CARB iADAM (CARB 2025i) and EPA Outdoor Air Quality Data Monitor Values Report (EPA 2025b) represent the highest concentrations experienced over a given year.

Exceedances of national and California standards are only shown for O_3 and particulate matter. Daily exceedances for particulate matter are estimated days because PM_{10} and $PM_{2.5}$ are not monitored daily. All other criteria pollutants did not exceed national or California standards during the years shown. There is no national standard for 1-hour O_3, annual PM_{10}, or 24-hour SO_2, nor is there a California 24-hour standard for $PM_{2.5}$.

[a] Measurements of PM_{10} and $PM_{2.5}$ are usually collected every 6 days and every 1 to 3 days, respectively. Number of days exceeding the standards is a mathematical estimate of the number of days concentrations would have been greater than the level of the standard had each day been monitored. The numbers in parentheses are the measured number of samples that exceeded the standard.

Salton Sea Air Basin Attainment Designation

Pursuant to the 1990 federal Clean Air Act amendments, EPA classifies air basins (or portions thereof) as "attainment" or "nonattainment" for each criteria air pollutant based on whether the NAAQS have been achieved. Generally, if the recorded concentrations of a pollutant are lower than the standard, the area is classified as "attainment" for that pollutant. If an area exceeds the standard, the area is classified as "nonattainment" for that pollutant. If there is not enough data available to determine whether the standard is exceeded in an area, the area is designated as "unclassified" or "unclassifiable." The designation of "unclassifiable/attainment" means that the area meets the standard or is expected to be meet the standard despite a lack of monitoring data. Areas that achieve the standards after a nonattainment designation are re-designated as maintenance areas and must have approved maintenance plans to ensure continued attainment of the standards. The California Clean Air Act, like its federal counterpart, called for the designation of areas as "attainment" or "nonattainment," but based on CAAQS rather than the NAAQS. Table 2-3 depicts the current attainment status of the SSAB with respect to the NAAQS and CAAQS.

Table 2-3. Salton Sea Air Basin Attainment Classification

Pollutant	Designation/Classification	
	NAAQS	CAAQS
Ozone (O_3), 1-hour	No NAAQS	**Nonattainment**
Ozone (O_3), 8-hour	**Nonattainment–marginal**	**Nonattainment**
Nitrogen dioxide (NO_2)	Unclassifiable/attainment	Attainment
Carbon monoxide (CO)	Unclassifiable/attainment	Attainment
Sulfur dioxide (SO_2)	Unclassifiable/attainment	Attainment
Coarse particulate matter (PM_{10})	Attainment/maintenance	**Nonattainment**
Fine particulate matter ($PM_{2.5}$)	Attainment[a]	Attainment
Lead	Unclassifiable/attainment	Attainment
Hydrogen sulfide	No NAAQS	Unclassified
Sulfates	No NAAQS	Attainment
Visibility-reducing particles	No NAAQS	Unclassified
Vinyl chloride	No NAAQS	No designation

Sources: EPA 2025c (national); CARB 2025j (California).
Notes: Bold text = not in attainment; attainment = meets the standards; attainment/maintenance = achieves the standards after a nonattainment designation; nonattainment = does not meet the standards; unclassified or unclassifiable = insufficient data to classify; unclassifiable/attainment = meets the standard or is expected to be meet the standard despite a lack of monitoring data.

[a] A portion of Imperial County, within the Salton Sea Air Basin area, is designated as nonattainment for PM2.5; however, this area does not include the Plan Area. Therefore, the area is designated as attainment.

In summary, the SSAB is designated as a nonattainment area for federal and state O_3 standards. The SSAB is also designated as a nonattainment area for the state PM_{10} standards. The SSAB is designated as unclassified or in attainment for all other criteria air pollutants.

Despite the current nonattainment status, air quality in the SSAB has generally improved since the inception of air pollutant monitoring in 1976. This improvement is mainly a result of lower-polluting on-road motor vehicles, more stringent regulation of industrial sources, and the implementation of emission reduction strategies by ICAPCD. This

trend toward cleaner air has occurred despite continued population growth (ICAPCD 2017a; ICAPCD 2018a; ICAPCD 2018b).

Other Applicable Regulations

Other applicable regulations include the following, which are discussed in Section 2.2.2, State Regulations:

- California Building Standards (Title 24, CALGreen)
- SB 1078, Executive Order (EO)-14-08, SBX1-2, SB 350, SB 100, SB 1020 (Renewable Energy Sources)
- AB 1493 and EO B-16-12
- Advanced Clean Cars Program
- Advanced Clean Trucks Program
    - Truck and Bus Regulation, On-Road Heavy-Duty Diesel Vehicles (In-use) Regulation

2.2.2.2 Toxic Air Contaminants

The state Air Toxics Program was established in 1983 under AB 1807 (Tanner). The California TAC list identifies more than 200 pollutants, of which carcinogenic and noncarcinogenic toxicity criteria have been established for a subset of these pollutants pursuant to the California Health and Safety Code. In accordance with AB 2728, the state list includes the (federal) HAPs.

In 1987, the Legislature enacted the Air Toxics "Hot Spots" Information and Assessment Act of 1987 (AB 2588) to address public concern over the release of TACs into the atmosphere. AB 2588 requires facilities emitting toxic substances to provide local air pollution control districts with information that will allow an assessment of the air toxics problem, identification of air toxics emissions sources, location of resulting hotspots, notification of the public exposed to significant risk, and development of effective strategies to reduce potential risks to the public over 5 years. TAC emissions from individual facilities are quantified and prioritized. "High-priority" facilities are required to perform a health risk assessment (HRA), and if specific thresholds are exceeded, the facility operator is required to communicate the results to the public in the form of notices and public meetings.

Truck Idling Regulations

Section 2485 in Title 13 of the CCR states that the idling of all diesel-fueled commercial vehicles (weighing over 10,000 pounds) during construction shall be limited to 5 minutes at any location. In addition, Section 93115 in Title 17 of the CCR states that operations of any stationary, diesel-fueled, compression-ignition engines shall meet specified fuel and fuel additive requirements and emissions standards.

California Health and Safety Code Section 41700

Section 41700 of the Health and Safety Code states that a person shall not discharge from any source whatsoever quantities of air contaminants or other material that cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public; or that endanger the comfort, repose, health, or safety of any of those persons or the public; or that cause, or have a natural tendency to cause, injury or damage to business or property. This section also applies to sources of objectionable odors.

Regulation for Mobile Cargo Handling Equipment at Ports and Intermodal Rail Yards

The Regulation for Mobile Cargo Handling Equipment at Ports and Intermodal Rail Yards, adopted by CARB in December 2005 and as amended in September 2011 (CCR Title 13, Section 2479), requires the use of best available control technology to reduce DPM and NO_x emissions from mobile cargo handling equipment at ports and intermodal railyards. Beginning in 2007, the regulation requires that newly purchased, leased, or rented cargo handling equipment for yard tractors be equipped with either a 2007 or newer on-road engine, a Tier 4 off-road engine, or the cleanest verified emissions control system that reduces DPM by 90% and NO_x by at least 70%. For non-yard tractor cargo handling equipment, the requirements include currently verified technologies that reduce DPM by 85%. The regulation also imposes retrofit, operational, emission standards, and compliance requirements 34 (CARB 2011).

2.2.3 Local Regulations

2.2.3.1 Southern California Association of Governments

SCAG is the regional planning agency for Los Angeles, Orange, Ventura, Riverside, San Bernardino, and Imperial Counties, and serves as a forum for regional issues relating to transportation, the economy, community development, and the environment. SCAG serves as the federally designated metropolitan planning organization for the Southern California region and is the largest metropolitan planning organization in the United States.

In 2024, SCAG's Regional Council adopted Connect SoCal (2024–2050 Regional Transportation Plan/Sustainable Communities Strategy [RTP/SCS]). Connect SoCal is a long-range visioning plan that balances future mobility and housing needs with economic, environmental, and public health goals. Connect SoCal charts a path toward a more mobile, sustainable, and prosperous region by making connections between transportation networks, between planning strategies and between the people whose collaboration can improve the quality of life for Southern Californians. Connect SoCal embodies a collective vision for the region's future and is developed with input from local governments, county transportation commissions, tribal governments, nonprofit organizations, businesses and local interested parties within Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura Counties (SCAG 2024).

2.2.3.2 Imperial County Air Pollution Control District

Although CARB is responsible for the regulation of mobile emissions sources within the state, local air quality management districts and air pollution control districts are responsible for enforcing standards and regulating stationary sources. ICAPCD is the regional agency responsible for the regulation and enforcement of federal, state, and local air pollution control regulations in the SSAB, where the project is located. ICAPCD operates monitoring stations in the SSAB, develops rules and regulations for stationary sources and equipment, prepares emissions inventory and air quality management planning documents, and conducts source testing and inspections. ICAPCD has implemented plans to attain state and federal standards of nonattainment pollutants, which are established in the CAAQS and NAAQS, in the SSAB. ICAPCD also provides rules and regulations to control or reduce criteria pollutant emissions from stationary sources or equipment. The County air quality, or clean air, plans for compliance with applicable federal and state air quality standards include:

- 2017 SIP for the 2008 8-Hour Ozone Standard, which includes a certified reasonably available control technology SIP analysis (2017 Ozone SIP)
- 2009 1997 8-Hour Ozone Modified AQMP
- 2018 Redesignation Request and Maintenance Plan for Particulate Matter less than 10 Microns in Diameter (2018 PM_{10} Plan)
- 2009 SIP for Particulate Matter Less Than 10 Microns in Aerodynamic Diameter
- 2018 County Annual Particulate Matter Less than 2.5 Microns in Diameter SIP
- 2009 Reasonably Available Control Technology SIP

Note that the Clean Air Act requires SIPs for nonattainment areas to require emission controls that are economically and technologically feasible. Emissions control technologies that meet these criteria are known as reasonably available control technology.

Regulations

All development projects within the ICAPCD are required to comply with existing ICAPCD rules as they apply to each specific project. Local provisions applicable to the Plan Area include the following:

ICAPCD Regulation I – General Provisions

Rule 106 – Abatement. The Board may, after notice and a hearing, issue, or provide for the issuance by the Hearing Board, of an order for abatement whenever the ICACPD finds that any person is in violation of the rules and regulations limiting the discharge of air contaminants into the atmosphere.

Rule 107 – Land Use. As part of his responsibility to protect the public health and property from the damaging effects of air pollution it shall be the duty of the Air Pollution Control Officer to review and advise the appropriate planning authorities within the ICACPD on all new construction or changes in land use which the Air Pollution Control Officer believes could become a source of air pollution problems.

ICAPCD Regulation II – Permits

Rule 207 – New and Modified Stationary Source Review. This Rule establishes preconstruction review requirements for new and modified Stationary Sources to ensure that the operation of such Sources do not interfere with the attainment or maintenance of Ambient Air Quality Standards (AAQS). This Rule shall provide for no net increase in emissions, pursuant to Health and Safety Code (H&SC) Section 40918, from new or modified Stationary Sources, which emit or have the Potential to Emit 137 pounds per day or more of any Nonattainment Pollutant or their Precursors

Rule 216 – Construction or Reconstruction of Major Stationary Sources that Emit Hazardous Air Pollutants. To require all owners and operators of stationary sources that emit hazardous air pollutants (HAPs) to install best available control technology for toxics (T-BACT) to any constructed or reconstructed major source. All T-BACT determinations shall be controlled to a level that the Air Pollution Control Officer (APCO) has determined to be, at a minimum, no less stringent than new source maximum achievable control technology (MACT) as required by the federal Clean Air Act (CAA), §112 (g)(2)(B) and implemented through 40 CFR §§63.40-63.44, of subpart B.

ICAPCD Regulation IV – Prohibitions

Rule 401 – Opacity of Emissions. Applies to any discharge of air pollutants and prohibits emissions in excess of specified opacity limits.

Rule 403 – General Limitations on the Discharge of Air Contaminants. Applies to the discharge of Air Contaminants, Combustion Contaminants, and Particulate Matter into the Atmosphere. Includes specific limitations and requirements for emissions from individual sources.

Rule 407 – Nuisances. No Person shall discharge from any Source whatsoever such quantities of Air Contaminants or other material which cause injury, detriment, nuisance or annoyance to any considerable number of persons or to the public or which endanger the comfort, repose, health or safety of any such persons or the public or which cause or have a natural tendency to cause injury or damage to business or property. This Rule shall not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowl or animals

Rule 414 – Storage of Reactive Organic Compound Liquids. Provisions of this Rule shall apply to any storage tank with a capacity equal to or greater than 1,500 gallons used to store Reactive Organic Compound (ROC) liquids with a true vapor pressure equal to or greater than 0.50 pounds per square inch absolute (psia).

Rule 424 – Architectural Coatings. Restricts the sale and application of architectural coatings, including limitations to VOC content in coatings.

ICAPCD Regulation VIII – Fugitive Dust Rules

Rules 800–806 – Limit the amount of fine PM entrained in the ambient air as a result of emissions generated from anthropogenic fugitive dust sources. Reasonably Available Control Measures are required during construction and operation activities to help reduce the amount of PM. This includes the application of dust suppressants or water once per hour, applying water to maintain a 12% soil moisture, implementation of wind barriers, installation of track-out control devices or wash down systems. Rule 805 also includes detailed standards for the use of unpaved roads, including limited use by the number of trucks and proximity to populated areas of 500 persons or more, and dust control methods including the application of gravel, watering, or closures. All construction sites, regardless of size, must comply with the requirements contained within Regulation VIII. Regulation VIII's main purpose is to reduce the amount of PM_{10} entrained into the atmosphere as a result of anthropogenic (human-made) fugitive dust sources. Therefore, under all preliminary modeling a presumption is made that all projects are in compliance with Regulation VIII.

ICAPCD Rule Standards to reduce Fugitive Dust

a. All disturbed areas, including Bulk Material storage which is not being actively utilized, shall be effectively stabilized and visible emissions shall be limited to no greater than 20% opacity for dust emissions by using water, chemical stabilizers, dust suppressants, tarps or other suitable material such as vegetative ground cover.
b. All on-site and off-site unpaved roads will be effectively stabilized and visible emissions shall be limited to no greater than 20% opacity for dust emissions by paving, chemical stabilizers, dust suppressants and/or watering.
c. All unpaved traffic areas one (1) acre or more with 75 or more average vehicle trips per day will be effectively stabilized and visible emission shall be limited to no greater than 20% opacity for dust emissions by paving, chemical stabilizers, dust suppressants and/or watering.

d. The transport of Bulk Materials shall be completely covered unless six inches of freeboard space from the top of the container is maintained with no spillage and loss of Bulk Material. In addition, the cargo compartment of all Haul Trucks is to be cleaned and/or washed at delivery site after removal of Bulk Material.
e. All Track-Out or Carry-Out will be cleaned at the end of each workday or immediately when mud or dirt extends a cumulative distance of 50 linear feet or more onto a paved road within an Urban area.
f. Movement of Bulk Material handling or transfer shall be stabilized prior to handling or at points of transfer with application of sufficient water, chemical stabilizers or by sheltering or enclosing the operation and transfer line.
g. The construction of any new Unpaved Road is prohibited within any area with a population of 500 or more unless the road meets the definition of a Temporary Unpaved Road. Any temporary unpaved road shall be effectively stabilized and visible emissions shall be limited to no greater than 20% opacity for dust emission by paving, chemical stabilizers, dust suppressants and/or watering.
h. Depending upon the project Regulation VIII, the ICAPCD may also provide for: Water exposed soil with adequate frequency for continued moist soil.
i. Replace ground cover in disturbed areas as quickly as possible
j. Automatic sprinkler system installed on all soil piles
k. Vehicle speed for all construction vehicles shall not exceed 15 mph on any unpaved surface at the construction site.
l. Develop a trip reduction plan to achieve a 1.5 AVR (average vehicle ridership) for construction employees
m. Implement a shuttle service to and from retail services and food establishments during lunch hours

Construction Equipment Exhaust

Although the preceding discussion of construction impacts and mitigation measures are primarily focused on PM_{10} emissions from fugitive dust sources, the ICAPCD states that lead agencies should also seek to reduce emissions from construction equipment exhaust (ICAPCD 2017b). Because of the availability of new control devices, required in the manufacturing of PM oxidation catalysts and NO_x absorbers, substantial reductions in PM and NO_x emissions from diesel engines is achievable. These new retrofit kits and in some cases new original equipment require the use of ultra-low sulfur diesel to be effective.

Standard Construction Combustion Equipment Conditions

a. Use of alternative fueled or catalyst equipped diesel construction equipment, including all off-road and portable diesel-powered equipment.
b. Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes as a maximum.
c. Limit, to the extent feasible, the hours of operation of heavy-duty equipment and/or the amount of equipment in use
d. Replace fossil-fueled equipment with electrically driven equivalents (provided they are not run via a portable generator set)

To help provide a greater degree of reduction of PM emissions from construction combustion equipment the ICAPCD recommends the following enhanced measures.

Enhanced Construction Equipment Conditions

a. Curtail construction during periods of high ambient pollutant concentrations; this may include ceasing of construction activity during the peak hour of vehicular traffic on adjacent roadways
b. Implement activity management (e.g., rescheduling activities to reduce short-term impacts)

Projects are required to implement all standard conditions as well as enhanced conditions for construction and operation as listed in the ICAPCD CEQA Handbook (ICAPCD 2017b).

ICAPCD Community Emissions Reduction Plans

The ICAPCD also administers the implementation of the AB 617 program within its jurisdictional boundaries, which includes the development of a CERP for those communities designated as disadvantaged communities under AB 617 to identify cost-effective measures to achieve emission reduction targets in the community. Preparation of a CERP and community air monitoring plan are conducted by the jurisdiction and is not prepared for individual projects. The Plan Area encompasses a portion of the County North End Community comprising the cities of Brawley, Westmorland, and Calipatria newly designated as disadvantaged in 2023. The reduction measures outlined in the North Imperial Phase 1 Community CERP, as approved by CARB on June 13, 2025, encompasses a range of strategies to reduce community-level exposure burden, including regulatory, enforcement, outreach and education, voluntary incentive-based programs, as well as partnerships with other agencies to address issues outside of the ICAPCD's direct regulatory authority (ICAPCD 2025).

The Plan Area is also nearby to another disadvantaged community, the Calexico, El Centro, Heber community, which was designated in 2018. The ICAPCD has published a community air monitoring plan for the community in 2019 and has partnered with Comite Civico del Valle, Inc. to lead a community advocacy group to develop the community's CERP. The reduction measures outlined in the community's CERP, approved by the ICAPCD Board in October 2019, are designed to reduce community-level exposure burdens. These measures include regulatory actions, enforcement efforts, outreach and education initiatives, voluntary incentive-based programs, and partnerships other agencies to address air quality issues beyond ICAPCD's direct regulatory authority (ICAPCD 2019).

2.2.3.3 County of Imperial

Imperial County General Plan

Adopted in 1993, the Imperial County General Plan consists of 10 elements entitled Land Use, Housing, Circulation and Scenic Highways, Noise, Seismic and Public Safety, Agricultural, Conservation and Open Space, Renewable Energy and Transmission, Water, and Parks and Recreation. Goals and policies pertaining to improving air quality are addressed in multiple chapters of the General Plan 2040. The Conservation and Open Space Element and the Renewable Energy and Transmission Element are the most applicable chapters of the City's General Plan, including the following objectives and policies (Imperial County 2016, 2015):

Conservation and Open Space Element

Goal 7: The County shall actively seek to improve the quality of air in the region.

Objective 7.1: Ensure that all project and facilities comply with current Federal, State, and local requirements for attainment of air quality objectives.

Objective 7.2: Develop management strategies to mitigate fugitive dust. Cooperate with all Federal, State and local agencies in the effort to attain air quality objectives.

Objective 7.3: Work cooperatively with the EPA and CARB in evaluating air quality monitoring in Imperial County.

Objective 7.4: Enforce and monitor environmental mitigation measures relating to air quality.

Objective 7.5: Coordinate efforts with Imperial County Transportation Commission (ICTC) and other appropriate agencies to reduce fugitive dust from unpaved streets.

Policy 5a: Reduce PM10 and PM2.5 emissions from unpaved roads, agricultural fields, and exposed Salton Sea lakebed.

Policy 5b: Work cooperatively with ICTC and other appropriate agencies to reduce vehicle miles traveled countywide in order to improve air quality and reduce greenhouse gas emissions.

Policy 5c: Promote alternative transportation programs, policies, and development in order to reduce vehicle miles traveled and address air quality and greenhouse gas emissions.

Renewable Energy and Transmission Element

Goal 4: Support development of renewable energy resources that will contribute to the restoration efforts of the Salton Sea.

Objective 4.2: Encourage the development of renewable energy facilities that will contribute to the reduction or elimination of airborne pollutants created by exposure of the seabed of the Salton Sea as it recedes.

Imperial County Regional Climate Action Plan

Adopted in June 2021, the Imperial County Regional Climate Action Plan (ICRCAP) includes estimated emissions inventories for various jurisdictions in the Imperial Valley, forecasts regional and local GHG emissions into the future, and identifies GHG reduction strategies and measures that would be implemented at the regional level to address climate change and achieve regional and state targets. Various GHG reduction measures implemented by the ICRCAP would also reduce criteria air pollutants and improve air quality in the region. The relevant regional GHG reduction measures identified within the ICRCAP are discussed further in Section 3.3.3.2.

2.3 Significance Criteria and Methodology

2.3.1 Thresholds of Significance

The significance criteria used to evaluate the LVSP impacts to air quality are based on the recommendations provided in Appendix G of the CEQA Guidelines. For the purposes of this air quality analysis, a significant impact would occur if the LVSP would (14 CCR 15000 et seq.):

1. Conflict with or obstruct implementation of the applicable air quality plan
2. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard
3. Expose sensitive receptors to substantial pollutant concentrations
4. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people

To address Threshold AQ-1, the potential for the project to conflict with or obstruct implementation of the applicable air quality plan, the project's potential to exceed the projected employment growth in the Imperial County 2018 PM_{10} Plan and the 2017 Ozone SIP regional growth projections were evaluated. CEQA Guidelines Appendix G indicates that, where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to determine whether the project would have a significant impact on air quality. ICAPCD has adopted thresholds to address the significance of air quality impacts resulting from a project, which are applied to address Threshold AQ-2, the potential for the project to result in a project and cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard.

Thresholds of significance (AQ-2) for project construction and operation are provided in Table 2-4. The project would result in a significant impact related to O_3, which is a nonattainment pollutant, if the project's construction or operational emissions exceeded ICAPCD's reactive organic gas or NO_x significance thresholds shown in Table 2-4. These emissions-based thresholds for O_3 precursors are intended to serve as a surrogate for an "O_3 significance threshold" (i.e., the potential for adverse O_3 impacts to occur) because O_3 itself is not emitted directly.

Table 2-4. Imperial County Air Pollution Control District Air Quality Significance Thresholds

Pollutant	Emissions (pounds per day)	
	Operational Threshold	Construction Threshold
ROGs	137	75
NO_x	137	100
CO	550	550
SO_x	150	N/A
PM_{10}	150	150
$PM_{2.5}$	550	N/A

Source: ICAPCD 2017b.

Notes: ROG = reactive organic gas; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; N/A = not applicable; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter.
The phasing out of leaded gasoline started in 1976. Because gasoline no longer contains lead, the project is not anticipated to result in impacts related to lead; therefore, it is not discussed in this analysis or included in Table 2-4.

To address Threshold AQ-3, the potential for the project to expose sensitive receptors to substantial pollutant concentrations, potential impacts related to TAC emissions and associated health risk, CO hotspots, and valley fever are evaluated.

ICAPCD does not have any quantified maximum incremental health risk thresholds. In accordance with ICAPCD guidelines, a construction and operational HRA was prepared, as discussed below. In light of the lack of established health risk thresholds that would apply to the project, CEQA allows lead agencies to identify thresholds of significance applicable to a project that are supported by substantial evidence. Therefore, to establish additional context in which to consider the order of magnitude of the project's TAC emissions, this analysis accounts for the following considerations by other government agencies and associations about what levels of TAC emissions constitute a significant health risk:

- The San Diego Air Pollution Control District established the following health risk thresholds: incremental cancer risk of 10 in 1 million, chronic hazard index of 1, and acute hazard index of 1.
- SCAQMD established the following health risk thresholds: incremental cancer risk of 10 in 1 million, chronic hazard index of 1, and acute hazard index of 1.
- The Mojave Desert Air Quality Management District established the following health risk thresholds: incremental cancer risk of 10 in 1 million, chronic hazard index of 1, and acute hazard index of 1.

Based on the above consistently applied thresholds across nearby air districts, the following health risk thresholds are applied herein to evaluate the potential for a significant impact: incremental cancer risk of 10 in 1 million, chronic hazard index of 1, and acute hazard index of 1.

To address Threshold AQ-4, the potential for the project to result in other emissions (such as those leading to odors) adversely affecting a substantial number of people, if a determination is made that a development project has the potential to cause a nuisance problem that impacts a considerable number of people, the project may be considered as having a significant effect (ICAPCD 2017b). The project would have a significant impact if it creates a nuisance pursuant to ICAPCD Rule 407, Nuisances, as defined in Section 2.2.3.2. Land uses and industrial operations associated with odor complaints include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding facilities (SCAQMD 1993).

2.3.2 Approach and Methodology

As described above, the LVSP is a policy document that does not include or propose any site-specific development. However, the LVSP would facilitate additional future development. Therefore, this document does not assess the site-specific construction and operational details of each future development within the LVSP area. Rather, it assesses the impacts associated with overall buildout. Analysis at a parcel- or site-specific level was not conducted because unless otherwise noted within this assessment, the actual locations of project development (and its chronologic sequence or concurrence) that may be implemented in the future are speculative.

Lithium Valley Specific Plan Measures and Regulations

Future development within LVSP would be subject to the following policies and regulations related to air quality (Imperial County 2025):

Program HP-7 Equipment Exhaust Minimization. Within Goal 5: Community Health and Prosperity (HP) of the Lithium Valley Specific Plan, Policy HP-7 requires all diesel-fueled off-road equipment shall meet EPA-rated Tier 4 Final engines consistent with Cal. Code Regs., tit. 13 § 2449 et seq. Electric or net-zero emissions equipment is preferred when commercially available and would also meet this requirement.

Program HP-7 is quantified in the construction and operational analyses.

Policy HP-18 Dust Suppression. Within Goal 5: Community Health and Prosperity (HP) of the Lithium Valley Specific Plan, Policy HP-18 requires future development projects to demonstrate compliance with ICAPCD Rules 800-806, all construction activities within the Specific Plan Area must implement the following dust control measures at a minimum:

- Water the exposed area three times per 8-hour workday at a minimum
- Water demolished area two times per 8-hour workday at a minimum
- For on-road fugitive dust, water unpaved roads two times daily at a minimum
- Limit vehicle speeds on unpaved roads to 15 miles per hour
- Sweep paved roads one per month at a minimum
- Pave unpaved roads as soon as feasible during the construction process

Policy HP-18 is quantified in the construction analysis within the California Emissions Estimator Model (CalEEMod) where “water three times per day,” “water demolished area,” “water unpaved construction roads,” and “limit vehicle speeds on unpaved roads” were selected.

Policy HP-19 Paved Roads. The County will ensure that all future development projects within the Plan Area are accessible by a paved road prior to providing a certificate of occupancy.

Policy HP-19 is not quantified in the analysis.

ICAPCD Dust Control Plan Requirements. Prior to the issuance of grading permits for an individual project, the individual project applicant or its designee shall develop and implement a dust control plan to reduce future project-generated construction dust and comply with applicable Air District rules and regulations. The plan shall include the following (ICAPCD 2005):

- The name(s), address(es), and phone number(s) of person(s) responsible for the preparation, submission, and implementation of the dust control plan and responsible for the project site;
- A sign posted at the project site that is visible to the public that includes a contact phone number for the public to report dust complaints;
- A plot plan which shows the type and location of each project;

- The total area of land surface to be disturbed, estimated daily throughput volume of earthmoving in cubic yards, and total area in acres of the entire project site;
- The expected start and completion dates of dust generating and soil disturbance activities to be performed on the site;
- The actual and potential sources of Fugitive Dust emissions on the site and the location of Bulk Material handling and storage areas, Paved and Unpaved Roads, entrances and exits where Track Out/Carry Out may occur, and Unpaved Traffic Areas;
- Dust Suppressants to be applied, including: product specifications; manufacturer's usage instructions (method, frequency, and intensity of application); type, number, and capacity of application equipment; and information on environmental impacts and approvals or certifications related to appropriate and safe use for ground application;
- Specific surface treatment(s) and/or control measures utilized to control Track Out/Carry Out, and sedimentation where unpaved and/or access points join paved public access roads;
- The dust control plan should describe all Fugitive Dust control measures to be implemented before, during, and after any dust generating activity

In compliance with ICAPCD Regulation VIII Rule 801, all construction within the Specific Plan Area would incorporate all the mandatory fugitive dust control elements as stated below:

A. Pre-Activity:
   a. Pre-water site sufficient to limit VDE [visible dust emissions] to 20% opacity, and
   b. Phase work to minimize the amount of disturbed surface area at any one time.

B. During Active Operations:
   a. Apply water or Chemical Stabilization as directed by product manufacturer to limit VDE to 20% opacity, or
   b. Construct and maintain wind barriers sufficient to limit VDE to 20% opacity. If utilizing wind barriers, control measure B.ii. above shall be implemented.
   c. Apply water or Chemical Stabilization as directed by product manufacturer to unpaved haul/access roads and Unpaved Traffic Areas sufficient to limit VDE to 20% opacity and meet the conditions of a Stabilized Unpaved Road.

C. Temporary Stabilization During Periods of Inactivity:
   a. Restrict vehicular access to the area by fencing or signage; and
   b. Apply water or Chemical Stabilization, as directed by product manufacturer, sufficient to comply with the conditions of a Stabilized Surface. If an area having 0.5 acres or more of disturbed surface area remains unused for seven or more days, the area must comply with the conditions for a Stabilized Surface area.

D. Track Out/Carry Out of Bulk Materials at the site shall be mitigated in compliance with Rule 803.

E. Unpaved Roads and Unpaved Traffic Areas at the site shall comply with Rule 805.

F. Bulk Material handling operations at the site shall comply with Rule 802.

G. Material transport of Bulk Material to, from, or around the site shall comply with Rule 802.

H. Haul trucks transporting Bulk Material to, from, or around the site shall comply with Rule 802.

ICAPCD Dust Control Plan requirements are not quantified in the analysis.

The following LVSP policies, programs, conditions, and design standards would further reduce air quality impacts and would have co-benefits related to GHG emissions, energy, and transportation; however, these measures were not quantified in the analysis or the estimation of criteria air pollutant emissions resulting from the development of the project.

Goal: Land Use (LU)

Policy LU-2: Ensure that developments of renewable energy facilities and transmission lines comply with the Imperial County Air Pollution Control District's regulations and mitigation measures. This includes dust suppression methods.

Policy LU-3: Promote land development practices that reduce energy and water consumption, air and water pollution, and greenhouse gas emissions.

Policy LU-4: Transit Supportive Development: Cluster employment around shared parking and major transit corridors and transfer nodes.

Policy LU-5: Reduce Airborne Pollutants through Land Use: Encourage the development of renewable energy facilities that will contribute to the reduction or elimination of airborne pollutants created by exposure of the seabed of the Salton Sea as it recedes.

Policy LU-10: Renewable Energy Leader: Install solar photovoltaic (PV) systems with a generation capacity at least 25% greater than the minimum requirements established by the 2022 California Building Standards Code (Title 24, Part 6). This would no longer apply if the most current California Building Code were to exceed 25% the 2022 requirement. Where feasible, implement alternative renewable energy sources (e.g., geothermal) to supplement on-site solar energy production.

Goal: Circulation & Transportation (CT)

Policy CT-1: Land Use Clustering: Cluster employment around shared parking and major transit corridors and transfer nodes.

Policy CT-4: Roadway Network: Develop a roadway network based on functional and urban design considerations, emphasizing connectivity and linkages, increasing transit movement and reducing total person delay, and compatibility with adjacent land uses.

Policy CT-12: Transportation Choices: Increase transportation choices within the Specific Plan area by providing viable alternatives to the exclusive reliance on vehicular travel by Lithium Valley employees and visitors.

Policy CT-13: Diverse Modes of Transportation: The County will support the diversification of travel modes used in Lithium Valley to increase employee trips made by bicycle, or public transit, including new mobility types like electric shuttles, electric vanpool/carpool, electric carsharing service, docked bikeshare, and e-scooter share.

Policy CT-14: Sustainable Freight: Promote sustainable freight transport modes and enhance regional economic competitiveness through efficient crossborder trade operations, realizing benefits such as reduced emissions, improved air quality, and long-term cost savings in logistics and transportation.

Policy CT-15: Zero Emission Vehicles: In support of California's Climate Action Plan for Transportation Infrastructure, (CAPTI) 2.0, the County will support the innovation in and development of the zero-emission vehicle (ZEV) infrastructure.

Policy CT-16: VMT Mitigation Bank: In support of California's Climate Action Plan for Transportation Infrastructure, (CAPTI) 2.0, the County will support Caltrans' statewide VMT mitigation bank or exchange program at the local and regional level.

Policy CT-19: Increased Bus Frequencies: The project tenants or individual employers shall coordinate with IVT to update bus service routes and service times to serve the project. The frequency of Imperial Valley Transit Route 2 will be significantly enhanced. On weekdays, service intervals will be reduced from the current 60-180 minutes to 15-30 minutes, while service internals on weekends will improve to 30-60 minutes. This increase is designed to provide more reliable and convenient transit options for residents and workers.

Policy CT-20: Dedicated Bus Lane on SR-111: The County, IVT, and project tenants shall coordinate with Caltrans for construction of a new outside lane, exclusive to buses, defined as a dedicated bus lane. This lane would significantly improve the reliability and timeliness of transit services, making public transportation a more attractive option for residents of the County.

Policy CT-21: Transit Hubs: As illustrated in Figure 5-10, Transit Network Map, strategically located transit hubs will be established to facilitate seamless connectivity. These hubs will serve as essential nodes within the transit system. Transit or Mobility hub is a central place where multiple modes of transportation converge, designed to facilitate seamless transfers, improve accessibility, and reduce travel time for commuters.

- The locations of the hubs are intended to connect the communities of Niland and Calipatria with the employment hub in the heart of the Plan Area. Implementation of Transit Hub would require coordination with IVT, Imperial County and communities of Niland and Calipatria.
- Each transit hub will include designated spaces for park and ride lots, shared vehicles, and shuttles to employment centers, ensuring efficient transfers and accessibility for commuters. Transit Hubs should be supplemented with additional strategies or programs that provide increased public transit, bicycle, and pedestrian access and improvements. The Transit Hub is anticipated to strengthen the effectiveness of other proposed TDM strategies.

Policy CT-22: Express Bus Routes: The County, IVT, and project tenants shall identify additional express bus routes that may be implemented based on the region's needs and demand and connect to the Plan Area. The express bus route shall consider stops at various locations within the northern communities inclusive of transit hubs and employment centers. This service will link workers to their jobs, promote rideshare opportunities, provide further travel opportunities to the general public and reduce greenhouse gas emissions. Express routes will also connect Calipatria to SDSU

Brawley Campus and Imperial Valley College, facilitating access to educational institutions and expanding opportunities for residents.

Policy CT-23: Employee Shuttle: An employee shuttle shall be implemented once there are three (3) employers with over 200 on-site employees, for a total of over 600 employees in the Plan Area. The employee shuttle would connect the transit hubs at Niland and Calipatria to the employment centers of over 200 on-site employees. This service would link workers to their jobs, promote rideshare opportunities and reduce greenhouse gas emissions. The employee shuttle or express bus route may be funded and operated by one or more of the following: the newly established Lithium Valley Infrastructure Special District, the participating private employers, or ICTC. In collaboration with ICTC and SCAG, Imperial County would also enhance transit safety and convenience by upgrading transit stops with shelters and real-time trip information systems. Improvements would be triggered based on operational needs and employment metrics, with a shuttle system introduced to connect employees to transit hubs and commercial destinations.

Policy CT-24: Construction Traffic Management Plan: The Project Applicant/Developers shall prepare a Construction Traffic Management Plan (CTMP), which shall be implemented by the construction contractor to address short-term traffic circulation, safety and access effects during project construction. The CTMP shall be reviewed and approved by the County prior to the issuance of the first building permit. The TMP and its requirements shall also be provided to all construction contractors as one component of building plan/contract document packages. The CTMP shall include, but not be limited to, the elements described below:

- Where applicable, maintain existing access for land uses in proximity of the project throughout construction.
- Where applicable, coordinate with adjacent or affected businesses and/or properties and emergency service providers to ensure adequate access exists to the project and neighboring sites.
- Where applicable, provide notification to transit providers, emergency service personnel, and local businesses and residents in advance of construction activities.
- Use measures to encourage and facilitate carpooling among construction workers to reduce use of single occupancy vehicles for commuting to the project site.
- Identify designated transport routes for heavy trucks to be used throughout project construction.
- Identification and description of Material Storage Locations (if any).
- Location and description of Construction Trailer (if any).
- Identification and Description of Parking - Estimate the number of workers and identify parking areas for their vehicles.
- Identification and Description of Maintenance Measures - Identify and describe measures taken to ensure that the work site and public right-of-way would be maintained (including dust control).
- Schedule deliveries and pick-ups of construction materials to non-peak travel periods along major travel corridors such as SR-111.
- Construction traffic shall be routed to avoid travel through, or proximate to, sensitive land uses.

- All temporary signage, temporary traffic control measures such as lane closures; the use of warning signs, cones, crossing structures, lights, and barricades will conform to the CA MUTCD [Manual on Uniform Traffic Control Devices].
- Flaggers that serve to alert motorists and pedestrians to slow moving trucks and to guide trucks to maneuver turn movement and prioritize movement of traffic at intersections to access highway and reduce queuing at major intersections and to facilitate truck turn maneuvers in and out of the project driveways.
- Coordination with Caltrans and Imperial County in order to secure the necessary encroachment and trip permits necessary for any oversized haul trucks.
- All construction contractors shall be provided with written information on the CTMP along with clear consequences to violators for failure to follow the plan.

Goal: Infrastructure (I)

Policy I-3: Water Recycling: Require all mineral recovery operations to recycle 20% of their water within the mineral recovery process itself, with the exception of reinjected brine water. Every five years the percentage shall go up 10% until it reaches an 80% water recycling requirement in 2055.

Policy I-17: Hazardous Material Handling and Pollution Prevention: Enforce strict procedures for handling hazardous materials to prevent pollution of air, water, and soil during waste management and disposal activities.

Program I-15: As roadways are improved, retrofit streetlights with LEDs.

Program I-17: Where feasible, the County shall supply municipal facilities with on-site renewable electricity.

Program I-26: Implement regulations to prevent air, water, and soil pollution during waste handling and disposal.

Goal: Community Health and Prosperity (HP)

Policy HP-4: Electric Vehicle Charging: Facilitate the deployment of EV charging infrastructure through the collaboration with local organizations to identify the best locations, funding mechanisms, and maintenance plans for EV charging stations.

Policy HP-8: Reduce Dust: Reduce fugitive windblown dust from unpaved roads and surfaces, especially related to truck traffic and agricultural operations.

Policy HP-9: Renewable by Phase 2: Mandate the use of 95%(on average) renewable energy in the mineral recovery process by 2040.

Policy HP-13: Zero-Emission Transportation: Continue to work with the Imperial County Transit Commission to offer zero-emission transportation methods throughout the North End of Imperial County.

Policy HP-20: Emergency Generators: The County will encourage through streamlined permitting/processing the use of alternative fuels and low emission engines designs for all emergency generators with the plan area to the extent feasible.

Program HP-5: Facilitate the deployment of air quality monitors within the Specific Plan Area through collaboration with local organizations to identify the best locations, funding mechanisms, and maintenance plans for air quality monitoring stations. This effort may also recommend and implement colored flags to signify Air Quality Index (AQI) levels.

Program HP-6: In addition to what is required in Section 4.2.1B. Indoor and Outdoor Break Areas, develop an incentive program for employers to provide indoor air purifiers to improve indoor air quality.

3.5 Standard Use Conditions

3.5.2 Anaerobic Digesting Facility

- Anaerobic Digestor facilities shall implement control technologies to minimize greenhouse gas (GHG) emissions, odor, and particulate matter from exiting the facility. Routine air quality testing must be conducted to ensure compliance with all Federal, State, and local emission standards.
- Advanced odor management systems (e.g. biofilters or carbon scrubbers) shall be required to control and minimize offsite odor impacts.

3.5.4 Data Centers

- For by-right data center projects, data centers must be powered on average by 30% or more from renewable energy sources, and carbon neutrality by 2045.
- Data centers must maintain an energy efficiency rating of 1.5 or lower through techniques such as advanced cooling systems, server virtualization, and energy-efficient hardware.

3.5.5 Hydrogen Fueling Stations

- Demonstrate that dispensed hydrogen is generated by at least 30% eligible renewable resources including: biomass, digester gas, municipal solid waste gas, fuel cells using renewable fuels, geothermal, photovoltaic, and wind. By 2045, the hydrogen fuel station shall demonstrate dispensed hydrogen is generated by 100% eligible renewable resources.

4.2 Design Standards

4.2.1 Site Design Standard

- Building Orientation
  - Maximize passive solar heating in the winter and minimize heat gain in the summer by the orienting longest facades of buildings east-west to mitigate heat gain and break up long warehouse buildings along main north-south vehicular corridors.
  - Loading bays shall be oriented internally between warehouse buildings to provide passive shading for loading facilities and trucks

- Indoor and Outdoor Break Areas
  - For industrial and office-type buildings, designate indoor 'clean zones' with HEPA air filtration for high-occupancy areas, such as control rooms and employee lounges. Include airlocks at entry points to reduce particulate tracking into the building, where feasible.
- Shade
  - All developments shall provide shade for at least 40%of all outside common or break areas within the development.
  - All development shall provide shade for at least 35%of all pedestrian routes within the development, including sidewalks, paseos, and pedestrian pathways.
- Parking Area Design
  - Photovoltaic arrays are encouraged to be roof-mounted on buildings and carports. Battery storage areas shall be screened with landscape screening or by an enclosure built with solid walls.
  - Incorporate a minimum of one (1) of the following design features in surface parking areas within the development:
    - Carports/ shade structures for 50%of all parking areas, common amenity areas, and pedestrian walkways. This requirement does not apply to tractor/trailer/semi-trucks and trailers and other vehicles used for industrial activities.
    - Increased paving with a high albedo, such as permeable pavers, porous asphalt, reinforced grass pavement (turf-crete), stone pavers, light-colored concrete, pervious concrete, high albedo asphalt, water-permeable asphalt, recycled class and rubber, photocatalytic concrete, reflective coatings.

4.2.3 Building Design

F. Energy Efficiency

- Install air-cooling systems or closed-loop water cooling systems in lieu of conventional air conditioning systems.
- Achieve 20%or better insulation performance than the current California Building Code through high R-value insulation, low U-value windows, and/or advanced window glazing systems. This would no longer apply if the most current California Building Code were to reach the maximum performance level.
- Buildings with loading docks shall provide electric outlets to power truck refrigeration units rather than allow trucks to idle while unloading. Electric outlets within truck loading docks shall also be built to installed to be compatible with EV truck charging.

CalEEMod 2022 Version 2022.1.1.29 was used to estimate emissions from construction and operation of the project (CAPCOA 2022). CalEEMod is a statewide computer model developed in cooperation with air districts throughout the state to quantify criteria air pollutant and GHG emissions associated with construction activities and operation of a variety of land use projects, such as residential, commercial, and industrial facilities. CalEEMod input parameters, including the land use type used to represent the project and its size, construction schedule, and

anticipated use of construction equipment, were based on information provided by the County or on default model assumptions if project specifics were unavailable.[4]

Table 2-5 presents the land use designations and land use types for the Project.

Table 2-5. Land Use Designation and Land Use Development Summary for the Project

Land Use Designation	Land Use Type
Solar	Commercial-Scale Solar
	Substations or transmission facilities
	Battery Energy Storage System
	Agrivoltaics
Floodway (River Corridor)	Passive Recreation
	Native Riparian Restoration
	Floatovoltaics
Community Opportunity Areas	Commercial
	Temporary Workforce Housing
	Emergency Services
	Public Transit Hub
	Housing
	Parks
	Workforce Training and Employment Services
Conservation	Habitat Restoration
	Passive Recreation
	Cultural Resource Preservation
Playas Renewables	Geothermal Energy and Ops
	Mineral Recovery, Processing, and Production
	Battery Manufacturing
	Research and Development
	Substations and transmission facilities
	Battery Energy Storage System
	Habitat Restoration Projects
Green Industrial	Geothermal Energy and Operation
	Mineral Recovery, Processing, and Production
	Green Hydrogen
	Battery Manufacturing
	Research and Development
	Anaerobic Digestor
	Substations
	Battery Energy Storage (Commercial-Scale)
	Data Centers
	Wastewater Treatment Plant

[4] The CalEEMod User Guide, including default assumptions, is available at: https://www.caleemod.com/documents/ user-guide/CalEEMod_User_Guide_v2022.1.pdf. Copies of the input and output files are available upon request to the County.

Table 2-5. Land Use Designation and Land Use Development Summary for the Project

Land Use Designation	Land Use Type
	Emergency Services
	Water Storage Facility
Manufacturing	Battery Manufacturing
	Automobile Manufacturing and Assembly Plants
	Manufacturing of Green Industrial Equipment
	Battery Energy Storage System (Commercial-Scale)
	Data Centers
	Business Industrial Parks
	Green Hydrogen
	Research and Development
	Wastewater Treatment Plant
Logistics	Outdoor Storage of Trucks, Trailers, Shipping Containers
	Wholesale Distribution
	Logistics and Warehousing
	Intermodal Rail Hub
	Electrical Vehicles Charging Stations as a Primary Use (Passenger and Heavy Duty)
	Business Industrial Parks
	Geothermal Energy and Operations
	Commercial-Scale Solar
	Temporary Construction Housing

2.3.2.1 Construction Emissions

Construction Scenario Assumptions

Based on information provided by the County, it is assumed that construction of the LVSP development would last 30 years, with the total construction period split into three consecutive 10-year phases. Construction was modeled to commence in January 2025[5] and conclude in December 2054. A summary of the LVSP development construction schedule is as follows:

- Phase 1: January 2025–December 2034
- Phase 2: January 2035–December 2044
- Phase 3: January 2045–December 2054

Although construction specifics for buildout of the LVSP development are unknown at this time, the analysis contained herein is based on each of the three 10-year buildout phases, with Year 1 of Phase 1 (2025) being the

[5] Although January 2025 has already passed since the inception of the Lithium Valley Specific Plan and its details, Phase 1 construction was initially modeled to begin in January 2025. This timeline reflects a conservative approach, considering that construction equipment would become more efficient over time due to the continual adoption of increasingly stringent Tier 4 regulations, fuel economy standards, and increased vehicular electrification.

estimated worst-case construction year because equipment and vehicle emission factors for later years would be slightly more efficient due to more stringent standards for off-road equipment and heavy-duty trucks, as well as fleet turnover replacing older equipment and vehicles in later years. To estimate construction for each buildout phase, default construction assumptions from CalEEMod were adjusted to fit a compressed 10-year timeline. To reflect the shortened construction schedule, equipment usage was scaled by a factor of 6 for Phase 1 and by a factor of 3 for Phases 2 and 3. This scaling accounts for the increased intensity of construction activity required to complete each phase within 10 years (i.e., compressing a 30-year schedule to 10 years [1/3 of the time] for Phase 1 and 15 years to 10 years [2/3 of the time] for Phases 2 and 3). Worker and vendor trips were multiplied by the same scaling factors to reflect the compressed construction period. CalEEMod default trip length values were used for the distances for all construction-related trips.

The following six default CalEEMod construction phases were included to present the potential range of emissions and capture a potential maximum daily and annual scenario: demolition, site preparation, grading, building construction, paving, and architectural coating. However, not all future development outlined in the LVSP would require each of these construction phases. Although only one phase of each type of construction activity is included in the model run, it is anticipated that this model scenario would include construction activity at more than one site within the Plan Area. For example, due to the undeveloped nature of most parcels in the Plan Area, many future projects may not require any demolition but would require site preparation and/or grading to prepare the site for development. For emissions modeling purposes, it was assumed that all construction phases (i.e., demolition, grading, paving, etc.) could occur simultaneously and would span the entire 10-year period.

The LVSP would implement Program HP-7, which requires all diesel-fueled off-road equipment to meet EPA-rated Tier 4 Final engines consistent with 13 CCR Section 2449 et seq. Electric or net-zero-emissions equipment is preferred when commercially available and would also meet this requirement. As such, Tier 4 Final construction equipment was assumed in the modeling.

- Any future construction resulting from implementation of the project would be required to implement Policy HP-18, Dust Suppression, and to comply with ICAPCD Regulation VIII to control dust emissions during any dust-generating activities. ICAPCD Regulation VIII requires implementation of various best available fugitive dust control measures for different sources for all construction activity within ICAPCD jurisdictional boundaries. Dust control measures include, but are not limited to, maintaining stability of soil through pre-watering of the site prior to clearing, grubbing, cut and fill, and earth-moving activities; stabilizing soil during and immediately after clearing, grubbing, cut and fill, and other earth-moving activities; stabilizing backfill during handling and at completion of activity; and pre-watering material prior to truck loading and ensuring that freeboard exceeds 6 inches. Although ICAPCD Regulation VIII requires fugitive dust control beyond watering control measures, compliance with ICAPCD Rule 403 is represented in CalEEMod by assuming three times daily watering of active sites (74% reduction in PM_{10} and $PM_{2.5}$ [CAPCOA 2022]).
- Furthermore, any future construction resulting from implementation of the project would be required to comply with ICAPCD Rule 424 (Architectural Coatings), which requires that the construction contractor shall procure architectural coatings that comply with the ICAPCD grams per liter VOC limits as identified by application type (paint and other finishes) to reduce associated VOC emissions.

Phase 1 (2025–2034)

Phase 1 would include development of a total of approximately 24,728,110 square feet of building space across 25,520 acres of mixed land uses. Phase 1 would also include development of new paved roads, surface parking spaces, parking structures, landscaping, and paved surfaces for circulation.

Land use development in Phase 1 is broken down into eight land use designations, as shown in Table 2-6. Due to modeling limitations, the land use figures seen in Table 2-6 were split into two model runs (Phase 1a: January 2025–December 2029, Phase 1b: January 2030–December 2034) that together represent construction during Phase 1. To inform the model, each land use designation was assigned a surrogate land use within CalEEMod based on the most representative anticipated project activity within the land use designation. The acreage and square footage of building space for each land use designation are shown in Table 2-6.

Table 2-6. Phase 1 Construction Land Use Information

Plan Land Use Designation	CalEEMod Land Use Subtype	Land Use Size (acres)[a]	Building Space (square feet)
Solar	Industrial – General Heavy Industry	1,768	50,000
Community Opportunity Areas	Commercial – General Office Building	815	532,793
Playas Renewables	Industrial – General Heavy Industry	2,313	1,511,362
Green Industrial	Industrial – General Heavy Industry	7,290	15,082,763
Manufacturing	Industrial – Manufacturing	1,834	2,996,137
Logistics	Industrial – Manufacturing	2,319	4,545,055
Floodway/River Corridor[b]	Recreational – City Park	1,042	—
Conservation[b]	Recreational – City Park	8,140	—
	Total	**25,520**	**24,728,110**

Notes: See Appendix A, Construction CalEEMod Files, for detailed land use figures. CalEEMod = California Emissions Estimator Model

a Land uses were input into CalEEMod based on building square footage.

b Due to modeling limitations, a separate CalEEMod model run was performed for the Floodway/River Corridor and Conservation land uses in Phase 1.

These land uses would not include buildings or require demolition. Construction phasing for the Floodway/River Corridor and Conservation land uses was modeled to be consistent with the start and end dates for Phase 1 construction (January 2025–December 2034).

The construction equipment mix and vehicle trips used for estimating construction emissions are shown in Table 2-7. For emissions modeling purposes, it was assumed that all construction phases would occur simultaneously and would span the entire 10-year period. For the analysis, it was assumed that heavy construction equipment would be operating at the site 5 days per week (22 days per month) during proposed project construction.

Table 2-7. Phase 1 Construction Scenario Assumptions

Construction Phase	One-Way Vehicle Trips			Equipment		
	Average Daily Worker Trips	Average Daily Vendor Truck Trips	Total Haul Truck Trips	Equipment Type	Quantity	Usage Hours
Demolition	90	24	2	Concrete/Industrial Saws	6	8
				Excavators	18	8
				Rubber-Tired Dozers	12	8
Site Preparation	108	24	0	Rubber-Tired Dozers	18	8
				Tractors/Loaders/Backhoes	24	8
Grading	120	24	48	Excavators	12	8
				Graders	6	8
				Rubber-Tired Dozers	6	8
				Tractors/Loaders/Backhoes	12	8
				Scrapers	12	8
Building Construction	6,168	2,418	0	Cranes	6	8
				Forklifts	18	6
				Generator Sets	6	8
				Tractors/Loaders/Backhoes	18	6
				Welders	6	8
Paving	90	24	0	Pavers	12	8
				Paving Equipment	12	8
				Rollers	12	8
Architectural Coating	1,236	24	0	Air Compressors	6	8
Site Preparation – Floodway/River Corridor and Conservation[a]	144	32	0	Rubber-Tired Dozers	24	8
				Tractors/Loaders/Backhoes	32	8
Grading – Floodway/River Corridor and Conservation[a]	160	32	0	Excavators	16	8
				Graders	8	8
				Rubber-Tired Dozers	8	8
				Scrapers	16	8
				Tractors/Loaders/Backhoes	16	8

Notes: See Appendix A for detailed information.
Table 2-7 represents total construction information for Phase 1, aggregating the equipment list and trip counts from both model runs for Phase 1 and the Floodway/River Corridor Construction phase.
The equipment listed in Table 2-7 reflects Tier 4 Final engine tier and dust control requirements per Program HP-7 and Policy HP-18.

[a] Due to modeling limitations, a separate CalEEMod model run was performed for the Floodway/River Corridor and Conservation land uses in Phase 1.

Although the majority of the site is undeveloped, with few existing structures that would be demolished, for emissions modeling purposes, demolition activity during Phase 1 was conservatively estimated to include the demolition and export of 10,000 square feet of building debris per year. This demolition would require trucks hauling debris from the project site; hauling for demolition export is reflected in the truck trip figures included in Table 2-7.

Phase 1 would also require earthwork and material movement (i.e., import and export) of existing land. In the absence of project specifics, a conservative estimate of 500,000 cubic yards was used for both import and export, based on site acreages. This material movement would require hauling to and from the project site; hauling for grading export is reflected in the truck trip figures included in Table 2-7.

Phase 1 would also require the paving of project site areas for parking, circulation, etc. In the absence of project specifics, paved area was calculated by subtracting the building area and landscape area from the total acreage. It was conservatively assumed that 100% of the paved area would be composed of asphalt.

Phase 2 (2035–2044)

Phase 2 would include development of a total of approximately 13,534,427 square feet of building space across 13,663 acres of mixed land uses. Phase 2 would also include development of new paved roads, surface parking spaces, parking structures, landscaping, and paved surfaces for circulation.

Land use development in Phase 2 is broken down into five land use designations, as shown in Table 2-8. Due to modeling limitations, the land use figures seen in Table 2-8 were split into two model runs (Phase 2a: January 2035–December 2039, Phase 2b: January 2040–December 2044), together representing construction during Phase 2. To inform the model, each land use designation was assigned a surrogate land use within CalEEMod based on the most representative anticipated project activity within the land use designation. The acreage and square footage of building space for each land use designation are shown in Table 2-8.

Table 2-8. Phase 2 Construction Land Use Information

Plan Land Use Designation	CalEEMod Land Use Subtype	Land Use Size (acres)[a]	Building Space (square feet)
Community Opportunity Areas	Commercial – General Office Building	828	1,082,063
Playas Renewables	Industrial – General Heavy Industry	4,344	2,838,429
Green Industrial	Industrial – General Heavy Industry	2,712	2,362,365
Manufacturing	Industrial – Manufacturing	1,375	1,496,911
Logistics	Industrial – Manufacturing	4,404	5,754,659
	Total	**13,663**	**13,534,427**

Notes: See Appendix A, Construction CalEEMod Files, for detailed land use figures. CalEEMod = California Emissions Estimator Model.
[a] Land uses were input into CalEEMod based on building square footage.

The construction equipment mix and vehicle trips used for estimating construction emissions are shown in Table 2-9. For emissions modeling purposes, it was assumed that all construction phases would occur simultaneously and

would span the entire 10-year period. For the analysis, it was assumed that heavy construction equipment would be operating at the site 5 days per week (22 days per month) during proposed project construction.

Table 2-9. Phase 2 Construction Information

Construction Phase	One-Way Vehicle Trips			Equipment		
	Average Daily Worker Trips	Average Daily Vendor Truck Trips	Total Haul Truck Trips	Equipment Type	Quantity	Usage Hours
Demolition	46	12	2	Concrete/Industrial Saws	3	8
				Excavators	9	8
				Rubber-Tired Dozers	6	8
Site Preparation	54	12	0	Rubber-Tired Dozers	9	8
				Tractors/Loaders/Backhoes	12	8
Grading	60	12	24	Excavators	6	8
				Graders	3	8
				Rubber-Tired Dozers	3	8
				Scrapers	6	8
				Tractors/Loaders/Backhoes	6	8
Building Construction	2,790	1,110	0	Cranes	3	8
				Forklifts	9	8
				Generator Sets	3	8
				Tractors/Loaders/Backhoes	9	8
				Welders	3	8
Paving	46	12	0	Pavers	6	8
				Paving Equipment	6	8
				Rollers	6	8
Architectural Coating	558	12	0	Air Compressors	3	8

Notes: See Appendix A, Construction CalEEMod Files, for detailed information.
Table 2-9 represents total construction information for Phase 2, aggregating the equipment list and trip counts from both model runs for Phase 2.
The equipment listed in Table 2-9 reflects Tier 4 Final engine tier and dust control requirements per Program HP-7 and Policy HP-18.

As in Phase 1, demolition activity during Phase 2 was conservatively estimated to include the demolition and export of 10,000 square feet of building debris per year. This demolition would require trucks hauling debris from the project site; hauling for demolition export is reflected in the truck trip figures included in Table 2-9.

Phase 2 would also require earthwork and material movement (i.e., import and export) of existing land. In the absence of project specifics, a conservative estimate of 250,000 cubic yards was used for both import and export, based on site acreages. This material movement would require hauling to and from the project site; hauling for grading export is reflected in the truck trip figures included in Table 2-9.

Phase 2 would also require the paving of project site areas for parking, circulation, etc. In the absence of project specifics, paved area was calculated by subtracting the building area and landscape area from the total acreage. It was conservatively assumed that 100% of the paved area would be composed of asphalt.

Phase 3 (2045–2054)

Phase 3 would include development of a total of approximately 8,759,333 square feet of building space across 12,439 acres of mixed land uses. Phase 3 would also include development of new paved roads, surface parking spaces, parking structures, landscaping, and paved surfaces for circulation.

Land use development in Phase 3 was broken down into four land use designations, as shown in Table 2-10. Due to modeling limitations, the land use figures seen in Table 2-10 were split into two model runs (Phase 3a: January 2045–December 2049, Phase 3b: January 2050–December 2054[6]), together representing construction during Phase 3. To inform the model, each land use designation was assigned a surrogate land use within CalEEMod based on the most representative anticipated project activity within the land use designation. To capture likely paved areas on site for parking and vehicle circulation, an amount of parking lot square footage was included in each land use, amounting to two times the amount of building space per land use. Furthermore, to capture likely landscaping area that would be included at each land use site, an amount of landscaping square footage totaling 10% of the parking lot area was included in each land use. Square footages for the parking lot and landscaping areas are shown in Table 2-10.

Table 2-10. Phase 3 Construction Land Use Information

Plan Land Use Designation	CalEEMod Land Use Subtype	Land Use Size (acres)a	Building Space (square feet)
Green Industrial	Industrial – General Heavy Industry	8,949	4,872,530
Manufacturing	Industrial – Manufacturing	2,608	2,840,550
Logistics	Industrial – Manufacturing	633	826,604
Playas Restoration	Industrial – General Heavy Industry	2,017	219,649
	Total	**12,439**	**8,759,333**

Notes: See Appendix A, Construction CalEEMod Files, for detailed land use figures. CalEEMod = California Emissions Estimator Model.
[a] Land uses were input into CalEEMod based on building square footage.

The construction equipment mix and vehicle trips used for estimating the project-generated construction emissions are shown in Table 2-11. For emissions modeling purposes, it was assumed that all construction phases would occur simultaneously and would span the entire 10-year period. For the analysis, it was assumed that heavy construction equipment would be operating at the site 5 days per week (22 days per month) during proposed project construction.

[6] The California Emissions Estimator Model (CalEEMod) provides emission factors for off-road equipment only through the year 2050. As a result, construction activities projected to occur beyond 2050 were conservatively modeled as if they would occur in 2050. Although this assumption does not reflect future technological advancements or regulatory changes, it represents a conservative approach, as emissions from equipment used in earlier years are generally expected to be higher, given that emission standards are anticipated to become more stringent over time.

Table 2-11. Phase 3 Construction Information

Construction Phase	One-Way Vehicle Trips			Equipment		
	Average Daily Worker Trips	Average Daily Vendor Truck Trips	Total Haul Truck Trips	Equipment Type	Quantity	Usage Hours
Demolition	46	12	2	Concrete/Industrial Saws	3	8
				Excavators	9	8
				Rubber-Tired Dozers	6	8
Site Preparation	54	12	0	Rubber-Tired Dozers	9	8
				Tractors/Loaders/Backhoes	12	8
Grading	60	12	24	Excavators	6	8
				Graders	3	8
				Rubber-Tired Dozers	3	8
				Scrapers	6	8
				Tractors/Loaders/Backhoes	6	8
Building Construction	1,842	720	0	Cranes	3	8
				Forklifts	9	8
				Generator Sets	3	8
				Tractors/Loaders/Backhoes	9	8
				Welders	3	8
Paving	46	12	0	Pavers	6	8
				Paving Equipment	6	8
				Rollers	6	8
Architectural Coating	372	12	0	Air Compressors	3	8

Notes: See Appendix A, Construction CalEEMod Files, for detailed information. Table 2-11 represents total construction information for Phase 3, aggregating the equipment list and trip counts from both model runs for Phase 3.
The equipment listed in Table 2-11 reflects Tier 4 Final engine tier and dust control requirements per Program HP-7 and Policy HP-18.

As in Phases 1 and 2, demolition activity during Phase 3 was conservatively estimated to include the demolition and export of 10,000 square feet of building debris per year. This demolition would require trucks hauling debris from the project site; hauling for demolition export is reflected in the truck trip figures included in Table 2-11.

Phase 3 would also require earthwork and material movement (i.e., import and export) of existing land. In the absence of project specifics, a conservative estimate of 250,000 cubic yards was used for both import and export, based on site acreages. This material movement would require hauling to and from the project site; hauling for grading export is reflected in the truck trip figures included in Table 2-11.

Phase 3 would also require the paving of project site areas for parking, circulation, etc. In the absence of project specifics, paved area was calculated by subtracting the building area and landscape area from the total acreage. It was conservatively assumed that 100% of the paved area would be composed of asphalt.

Roadways and Infrastructure Construction

Roadway network and infrastructure construction activities for the project were modeled in CalEEMod using the Linear land use type. The land use subtypes included road construction, road widening, and bridge/overpass construction. For the purposes of modeling, it was assumed that roadway network construction would increase in tandem with the building square footage growth for each Phase. Buildout of roadways and infrastructure construction assumptions, including phasing and equipment information, are based on CalEEMod default values and included below in Table 2-12.

Table 2-12. Roadways and Infrastructure Construction Assumptions

Construction Phase	One-Way Vehicle Trips			Equipment		
	Average Daily Worker Trips	Average Daily Vendor Truck Trips	Total Haul Truck Trips	Equipment Type	Quantity	Usage Hours
Phase 1						
Grubbing and Land Clearing	188	8	24	Crawler Tractors	3	8
				Excavators	5	8
				Signal Boards	67	8
Grading and Excavation	288	12	6	Crawler Tractors	4	8
				Excavators	10	8
				Graders	5	8
				Rollers	7	8
				Rubber-Tired Loaders	5	8
				Scrapers	8	8
				Signal Boards	67	8
				Tractors/Loaders/Backhoes	8	8
				Cranes	1	8
Drainage, Utilities, and Subgrade	250	8	8	Air Compressors	3	8
				Generator Sets	3	8
				Graders	4	8
				Plate Compactors	3	8
				Pumps	3	8
				Rough-Terrain Forklifts	3	8
				Scrapers	7	8
				Signal Boards	67	8
				Tractors/Loaders/Backhoes	7	8
Paving	216	8	92	Pavers	3	8
				Paving Equipment	3	8
				Rollers	6	8
				Signal Boards	67	8

Table 2-12. Roadways and Infrastructure Construction Assumptions

Construction Phase	One-Way Vehicle Trips			Equipment		
	Average Daily Worker Trips	Average Daily Vendor Truck Trips	Total Haul Truck Trips	Equipment Type	Quantity	Usage Hours
				Tractors/Loaders/Backhoes	7	8
Phase 2						
Grubbing and Land Clearing	114	8	10	Crawler Tractors	3	8
				Excavators	5	8
				Signal Boards	37	8
Grading and Excavation	214	12	4	Crawler Tractors	4	8
				Excavators	10	8
				Graders	5	8
				Rollers	7	8
				Rubber-Tired Loaders	5	8
				Scrapers	8	8
				Signal Boards	37	8
				Tractors/Loaders/Backhoes	8	8
				Cranes	1	8
Drainage, Utilities, and Subgrade	176	8	4	Air Compressors	3	8
				Generator Sets	3	8
				Graders	4	8
				Plate Compactors	3	8
				Pumps	3	8
				Rough-Terrain Forklifts	3	8
				Scrapers	7	8
				Signal Boards	37	8
				Tractors/Loaders/Backhoes	7	8
Paving	140	8	52	Pavers	3	8
				Paving Equipment	3	8
				Rollers	6	8
				Signal Boards	37	8
				Tractors/Loaders/Backhoes	7	8
Phase 3						
Grubbing and Land Clearing	78	8	8	Crawler Tractors	3	8
				Excavators	5	8
				Signal Boards	23	8
Grading and Excavation	178	12	2	Crawler Tractors	4	8
				Excavators	10	8
				Graders	5	8

Table 2-12. Roadways and Infrastructure Construction Assumptions

Construction Phase	One-Way Vehicle Trips			Equipment		
	Average Daily Worker Trips	Average Daily Vendor Truck Trips	Total Haul Truck Trips	Equipment Type	Quantity	Usage Hours
				Rollers	7	8
				Rubber-Tired Loaders	5	8
				Scrapers	8	8
				Signal Boards	23	8
				Tractors/Loaders/Backhoes	8	8
				Cranes	1	8
Drainage, Utilities, and Subgrade	140	8	4	Air Compressors	3	8
				Generator Sets	3	8
				Graders	4	8
				Plate Compactors	3	8
				Pumps	3	8
				Rough-Terrain Forklifts	3	8
				Scrapers	7	8
				Signal Boards	23	8
				Tractors/Loaders/Backhoes	7	8
Paving	106	8	36	Pavers	3	8
				Paving Equipment	3	8
				Rollers	6	8
				Signal Boards	23	8
				Tractors/Loaders/Backhoes	7	8

Notes: See Appendix A, Construction CalEEMod Files, for detailed information.
The equipment listed in Table 2-12 reflects Tier 4 Final engine tier and dust control requirements per Program HP-7 and Policy HP-18.

Phase 1 construction would feature approximately 14 miles of new roads constructed, 20 miles of roads widened, and 1.3 acres of bridge and overpass constructed. As a result of the associated material movement, Phase 1 roadway construction would result in approximately 50,000 cubic yards of material export during the Grubbing and Land Clearing; Grading and Excavation; and Drainage, Utilities, and Subgrade phases, , requiring haul trucks for each phase as shown in Table 2-12. Based on the total paved area to be constructed during Phase 1, approximately 92 one-way haul truck trips per day would be required during the paving phase. Furthermore, the roadway construction process would include the striping or coating of approximately 918,000 square feet of paved area, or 6% of the total paved area.

Phase 2 construction would feature approximately 8 miles of new roads constructed, 11 miles of roads widened, and 0.7 acres of bridge and overpass constructed. As a result of the associated material movement, Phase 2 roadway construction would result in approximately 20,000 cubic yards of material export during the Grubbing and Land Clearing; Grading and Excavation; and Drainage, Utilities, and Subgrade phases, requiring haul trucks for each phase as shown in Table 2-12. Based on the total paved area to be constructed during Phase 2, approximately 52 one-way haul truck trips

per day would be required during the paving phase. Furthermore, the roadway construction process would include the striping or coating of approximately 503,000 square feet of paved area, or 6% of the total paved area.

Phase 3 construction would feature approximately 5 miles of new roads constructed, 7 miles of roads widened, and 0.4 acres of bridge and overpass constructed. As a result of the associated material movement, Phase 3 roadway construction would result in approximately 15,000 cubic yards of material export during the Grubbing and Land Clearing; Grading and Excavation; and Drainage, Utilities, and Subgrade phases, , requiring haul trucks for each phase, as shown in Table 2-12. Based on the total paved area to be constructed during Phase 3, approximately 36 one-way haul truck trips per day would be required during the paving phase. Furthermore, the roadway construction process would include the striping or coating of approximately 325,000 square feet of paved area, or 6% of the total paved area.

Geothermal Drilling Construction

The construction of geothermal facilities requires drilling for production wells and pipelines. Geothermal drilling would require off-road equipment, including drill rigs, that would be operational 24 hours per day and 7 days per week and would result in the movement of materials off site. All construction phases would include the construction of geothermal facilities; each facility's construction was assumed to span 18 months. Geothermal drilling construction assumptions are presented in Table 2-13.

Table 2-13. Geothermal Drilling Construction Assumptions

Construction Phase	One-Way Vehicle Trips			Equipment		
	Average Daily Worker Trips	Average Daily Vendor Truck Trips	Total Haul Truck Trips	Equipment Type	Quantity	Usage Hours
Phase 1						
Drilling	68	20	74	Generator Sets	8	24
				Pumps	2	24
				Bore/Drill Rigs	2	24
				Forklifts	10	24
				Aerial Lifts	2	24
				Tractors/Loaders/Backhoes	2	24
Phases 2–3						
Drilling	34	10	44	Generator Sets	4	24
				Pumps	1	24
				Bore/Drill Rigs	1	24
				Forklifts	5	24
				Aerial Lifts	1	24
				Tractors/Loaders/Backhoes	1	24

Notes: See Appendix A, Construction CalEEMod Files, for detailed information.
The equipment listed in Table 2-13 reflects Tier 4 Final engine tier and dust control requirements per Program HP-7 and Policy HP-18.

Phase 1 would feature the construction of 11 new geothermal facilities over the whole 10-year period. Drilling would result in approximately 153,000 cubic yards import and 1,369,000 cubic yards of material export. Material import/export would require approximately 74 one-way haul truck trips per day during the geothermal construction period.

Phase 2 would feature the construction of four new geothermal facilities over a 6-year period. Drilling would result in approximately 56,000 cubic yards of material import and 498,000 cubic yards of material export. Material import/export would require approximately 44 one-way haul truck trips per day during the geothermal construction period.

Phase 3 would feature the construction of two new geothermal facilities over a 2-year period. Drilling would result in approximately 28,000 cubic yards of material import and 249,000 cubic yards of material export. Material import/export would require approximately 44 one-way haul truck trips per day during the geothermal construction period.

2.3.2.2 Operational Emissions

Operational Land Use Assumptions

Project-generated operational criteria air pollutant emissions were estimated for mobile, area, energy, off-road equipment, and stationary sources using CalEEMod and spreadsheet emissions calculations based on project-specific values, as well as CalEEMod default values by land use type and quantity when project specifics were not available. The project's year of full buildout is estimated to be 2055. In addition to full buildout of the project, two interim operational years were modeled to estimate project-generated emissions as the project is developed and implemented. The three operational scenarios were developed, as follows:

- **Phase 1 (2035):** Includes interim operations of land uses constructed through Phase 1 (2035)
- **Phase 2 (2045):** Includes interim operations of land uses constructed through Phase 1 and Phase 2 (2045)
- **Total Buildout (2055):** Includes buildout operations of land uses constructed through Phase 1, Phase 2, and Phase 3 (2055)

Tables 2-14 through 2-16 provide a summary of the land use inputs included in the CalEEMod modeling for Phases 1, 2, and buildout of the project, with additional details provided in Appendix B, Operational CalEEMod Files. Each land use was modeled in CalEEMod as its own individual model run. Land use information was determined based on the cumulative percent of primary or secondary allowable uses within each land use designation.

Parking

For land uses anticipated to include building area, an associated parking lot was assumed based on the type of land use. For land uses anticipated to necessitate more vehicle trips and a higher ratio of paved areas, such as manufacturing, transit, commercial, and warehouse uses, the associated parking lot square footage was assumed to be 5 times the building square footage. For all other land uses anticipated to include building space, the associated parking lot was assumed to be 2 times the building square footage. An exception to this assumption was the Parks land use, which was assumed to include parking area that would be 10% of the total lot square footage. Land uses that are not anticipated to include building space (i.e., Water Storage Facility, Outdoor Storage,

and EV Charging Stations) are modeled as parking lots in CalEEMod and do not have additional parking lots associated with them.

Landscaping

For land uses anticipated to include building area, the landscaping square footage was assumed to be 10% of the associated parking lot square footage. An exception to this assumption was the Parks land use, which was assumed to include a landscaping area that would be 90% of the total lot square footage. For land uses that are not anticipated to include building space (i.e., Water Storage Facility and Outdoor Storage), landscaping area was assumed to be 2% of the total lot square footage. For the EV Charging Stations land use, landscaping area was assumed to be 10% of the total lot square footage.

Table 2-14. Operational Land Use Assumptions – Phase 1 – 2035

Land Use Type	CalEEMod Land Use Type	CalEEMod Land Use Subtype	Building Square Footage	Land Use Acreage	Parking Lot Area (square feet)	Landscape Area (square feet)
Solar	Industrial	General Heavy Industry	276,503	941.4	533,006	55,300
Substations	Industrial	General Heavy Industry	510,922	477.1	6,284,485	102,184
Battery Energy Storage System	Industrial	General Heavy Industry	945,311	884.4	1,890,622	189,062
Agrivoltaics	Industrial	General Heavy Industry	10,000	353.6	20,000	2,000
Floatovoltaics	Industrial	General Heavy Industry	10,000	208.4	20,000	2,000
Parks	Recreational	City Park	2,000	53.2	231,531	2,083,778
Housing	Residential	Low-Rise Apartments	—	—	—	—
Temporary Workforce/ Construction Housing	Residential	Mobile Home Park	400,789	305.4	801,579	80,158
Workforce Training and Employment Services	Commercial	General Office Building	36,772	53.2	73,543	7,354
Public Transit Hub	Commercial	General Office Building	49,162	70.9	245,811	24,581
Research and Development	Commercial	Research and Development	875,388	494.1	1,750,777	175,078
Commercial	Retail	Regional Shopping Center	247,411	354.4	1,237,053	123,705
Emergency Services	Industrial	General Heavy Industry	363,386	216.7	726,773	72,677
Geothermal Energy	Industrial	General Heavy Industry	7,469,299	4,165.2	14,938,598	1,493,860
Mineral Recovery, Processing, and Production	Industrial	General Heavy Industry	2,916,824	1,721.4	5,833,648	583,365
Battery Manufacturing	Industrial	Manufacturing	2,110,313	1,208.4	10,551,566	1,055,157
Green Hydrogen	Industrial	General Heavy Industry	1,346,781	638.2	2,693,562	269,356

Table 2-14. Operational Land Use Assumptions – Phase 1 – 2035

Land Use Type	CalEEMod Land Use Type	CalEEMod Land Use Subtype	Building Square Footage	Land Use Acreage	Parking Lot Area (square feet)	Landscape Area (square feet)
Anaerobic Digester	Industrial	General Heavy Industry	50,000	291.6	100,000	10,000
Wastewater Treatment Plant	Industrial	General Heavy Industry	276,958	146.3	553,915	55,392
Water Storage Facility	Parking	Parking Lot	—	29.2	1,270,127	25,403
Data Centers	Industrial	General Heavy Industry	2,198,961	730.8	10,994,803	1,099,480
Business Industrial Parks	Industrial	General Heavy Industry	588,484	267.5	2,942,421	294,242
Automobile Manufacturing	Industrial	Manufacturing	239,691	146.7	1,198,455	119,845
Manufacturing of Green Industrial Equipment	Industrial	Manufacturing	719,073	719.1	3,595,364	359,536
Wholesale Distribution	Industrial	15% Refrigerated Warehouse; 85% Unrefrigerated Warehouse[a]	1,515,018	556.5	7,575,091	757,509
Logistics and Warehousing	Industrial	15% Refrigerated Warehouse; 85% Unrefrigerated Warehouse[a]	1,010,012	371.0	5,050,061	505,006
Outdoor Storage of Trucks, Trailers, and Shipping Containers	Parking	Parking Lot	—	556.5	24,240,291	484,805
Intermodal Rail Hub	Industrial	Unrefrigerated Warehouse –Rail	757,509	278.24	3,787,545	378,755
Electric Vehicle Charging Stations	Parking	50% Parking Lot; 50% Other Asphalt Surfaces	—	92.8	4,040,049	404,005

Source: Appendix B, Operational CalEEMod Files.

Notes: CalEEMod = California Emissions Estimator Model.

[a] Based on the South Coast Air Quality Management District High-Cube Warehouse Business Survey, it was assumed that 15% of floor space is designated for cold storage (SCAQMD 2014).

Table 2-15. Operational Land Use Assumptions – Phase 2 – 2045

Land Use Type	CalEEMod Land Use Type	CalEEMod Land Use Subtype	Building Square Footage	Land Use Acreage	Parking Lot Area (square feet)	Landscape Area (square feet)
Solar	Industrial	General Heavy Industry	596,206	1,117.5	1,192,413	119,241
Substations	Industrial	General Heavy Industry	647,822	645.3	1,295,645	129,564
Battery Energy Storage System	Industrial	General Heavy Industry	1,289,648	1,276.7	2,579,297	257,930
Agrivoltaics	Industrial	General Heavy Industry	10,000	353.6	20,000.00	2,000.0
Floatovoltaics	Industrial	General Heavy Industry	10,000	208.4	20,000.00	2,000.0
Parks	Recreational	City Park	4,000	102.8	447,937	4,031,433
Housing	Residential	Low-Rise Apartments	136,768	66.2	273,536	27,354
Temporary Workforce/ Construction Housing	Residential	Mobile Home Park	983,843	680.2	1,967,687	196,767
Workforce Training and Employment Services	Commercial	General Office Building	102,409	102.8	204,819	20,482
Public Transit Hub	Commercial	General Office Building	136,768	137.1	683,839	68,384
Research and Development	Commercial	Research and Development	1,189,787	858.9	2,379,575	237,957
Commercial	Retail	Regional Shopping Center	686,506	685.6	3,432,531	343,253
Emergency Services	Industrial	General Heavy Industry	500,208	337.1	1,000,416	100,042

Table 2-15. Operational Land Use Assumptions – Phase 2 – 2045

Land Use Type	CalEEMod Land Use Type	CalEEMod Land Use Subtype	Building Square Footage	Land Use Acreage	Parking Lot Area (square feet)	Landscape Area (square feet)
Geothermal Energy	Industrial	General Heavy Industry	10,447,002	7,599.3	20,894,003	2,089,400
Mineral Recovery, Processing, and Production	Industrial	General Heavy Industry	4,067,466	3,197.9	8,134,932	813,493
Battery Manufacturing	Industrial	Manufacturing	2,918,740	2,102.8	14,593,702	1,459,370
Green Hydrogen	Industrial	General Heavy Industry	1,588,552	896.4	3,177,104	317,710
Anaerobic Digester	Industrial	General Heavy Industry	50,000	400.1	100,000	10,000
Wastewater Treatment Plant	Industrial	General Heavy Industry	361,442	228.4	722,884	72,288
Water Storage Facility	Parking	Parking Lot	—	40.01	1,742,666	34,853
Data Centers	Industrial	General Heavy Industry	2,684,546	1,113.5	13,422,731	1,342,273
Business Industrial Parks	Industrial	General Heavy Industry	588,484	628.0	5,864,114	586,411
Automobile Manufacturing	Industrial	Manufacturing	359,444	256.7	1,797,219	179,722
Manufacturing of Green Industrial Equipment	Industrial	Manufacturing	1,078,332	770.2	5,391,658	539,166
Wholesale Distribution	Industrial	15% Refrigerated Warehouse; 85% Unrefrigerated Warehouse[a]	3,433,238	1,613.4	17,166,190	1,716,619
Logistics and Warehousing	Industrial	15% Refrigerated Warehouse; 85% Unrefrigerated Warehouse[a]	2,288,825	1,075.6	11,444,126	1,144,413

Table 2-15. Operational Land Use Assumptions – Phase 2 – 2045

Land Use Type	CalEEMod Land Use Type	CalEEMod Land Use Subtype	Building Square Footage	Land Use Acreage	Parking Lot Area (square feet)	Landscape Area (square feet)
Outdoor Storage of Trucks, Trailers, and Shipping Containers	Parking	Parking Lot	—	1,613.4	70,281,469	1,405,629
Intermodal Rail Hub	Industrial	Unrefrigerated Warehouse –Rail	1,716,619	806.7	8,583,095	858,310
Electric Vehicle Charging Stations	Parking	50% Parking Lot; 50% Other Asphalt Surfaces	—	268.9	11,713,578	1,171,358

Source: Appendix B, Operational CalEEMod Files.
Notes: CalEEMod = California Emissions Estimator Model.
[a] Based on the South Coast Air Quality Management District High-Cube Warehouse Business Survey, it was assumed that 15% of floor space is designated for cold storage (SCAQMD 2014).

Table 2-16. Operational Land Use Assumptions – Buildout – 2055

Land Use Type	CalEEMod Land Use Type	CalEEMod Land Use Subtype	Building Square Footage	Land Use Acreage	Parking Lot Area (square feet)	Landscape Area (square feet)
Solar	Industrial	General Heavy Industry	618,129	294.2	618,129	123,626
Substations	Industrial	General Heavy Industry	794,089	701.6	1,588,178	158,818
Battery Energy Storage System	Industrial	General Heavy Industry	1,709,914	1,489.7	3,419,829	341,983
Agrivoltaics	Industrial	General Heavy Industry	—	—	—	—
Floatovoltaics	Industrial	General Heavy Industry	10,000	208.4	20,000	2,000
Parks	Recreational	City Park	4,000	102.8	447,937	4,031,433
Housing	Residential	Low-Rise Apartments	136,768	66.2	273,536	27,354

Table 2-16. Operational Land Use Assumptions – Buildout – 2055

Land Use Type	CalEEMod Land Use Type	CalEEMod Land Use Subtype	Building Square Footage	Land Use Acreage	Parking Lot Area (square feet)	Landscape Area (square feet)
Temporary Workforce/ Construction Housing	Residential	Mobile Home Park	1,029,766	705.6	2,059,531	205,953
Workforce Training and Employment Services	Commercial	General Office Building	102,409	102.41	204,819	20,482
Public Transit Hub	Commercial	General Office Building	136,768	137.1	683,839	68,384
Research and Development	Commercial	Research and Development	1,563,242	1,373.3	3,126,485	312,648
Commercial	Retail	Regional Shopping Center	686,506	685.6	3,432,531	343,253
Emergency Services	Industrial	General Heavy Industry	601,719	516.1	1,203,438	120,344
Geothermal Energy	Industrial	General Heavy Industry	12,546,106	11,216.8	25,092,213	2,509,221
Mineral Recovery, Processing, and Production	Industrial	General Heavy Industry	4,879,554	4,629.7	10,198,406	1,019,841
Battery Manufacturing	Industrial	Manufacturing	4,006,517	3,444.7	20,032,583	2,003,258
Green Hydrogen	Industrial	General Heavy Industry	2,079,813	1,690.5	4,159,626	415,963
Anaerobic Digester	Industrial	General Heavy Industry	100,000	758.0	200,000	20,000
Wastewater Treatment Plant	Industrial	General Heavy Industry	525,820	422.2	1,051,639	105,164
Water Storage Facility	Parking	Parking Lot	—	75.8	3,301,876	66,038
Data Centers	Industrial	General Heavy Industry	3,596,589	2,067.7	17,982,947	1,798.295
Business Industrial Parks	Industrial	General Heavy Industry	1,440,545	848.5	7,202,725	720,273
Automobile Manufacturing	Industrial	Manufacturing	586,688	465.4	2,933,439	293,344

Table 2-16. Operational Land Use Assumptions – Buildout – 2055

Land Use Type	CalEEMod Land Use Type	CalEEMod Land Use Subtype	Building Square Footage	Land Use Acreage	Parking Lot Area (square feet)	Landscape Area (square feet)
Manufacturing of Green Industrial Equipment	Industrial	Manufacturing	1,760,063	1,760.1	8,800,317	880,032
Wholesale Distribution	Industrial	15% Refrigerated Warehouse; 85% Unrefrigerated Warehouse[a]	3,708,772	1,765.4	18,543,862	1,854,386
Logistics and Warehousing	Industrial	15% Refrigerated Warehouse; 85% Unrefrigerated Warehouse[a]	2,472,515	1,176.9	12,362,575	1,236,257
Outdoor Storage of Trucks, Trailers, and Shipping Containers	Parking	Parking Lot	—	1,765.4	76,899,104	1,537,982
Intermodal Rail Hub	Industrial	Unrefrigerated Warehouse –Rail	1,854,386	882.7	9,271,931	927,193
Electric Vehicle Charging Stations	Parking	50% Parking Lot; 50% Other Asphalt Surfaces	—	294.2	12,816,517	1,281,652

Source: Appendix B, Operational CalEEMod Files.
Notes: CalEEMod = California Emissions Estimator Model.
[a] Based on the South Coast Air Quality Management District High-Cube Warehouse Business Survey, it was assumed that 15% of floor space is designated for cold storage (SCAQMD 2014).

Operational Emission Source Assumptions

The calculations of mobile, area, energy, off-road equipment, and stationary source criteria air pollutant emissions are explained below.

Mobile Sources

Mobile sources for the land uses developed under the LVSP would be residents, visitors, customers, employees, and trucks traveling to and from the project sites. CalEEMod was used to estimate mobile source emissions for the projects under buildout of the LVSP in 2055 and additional interim operational scenarios, but project-specific input values were used where available, as explained below. However, the EMFAC models in CalEEMod only have emission factors through 2050. As such, the year 2050 was assumed for estimating mobile source emissions, which is considered conservative given increased electrification and fuel economy over time due to regulatory mandates and retirement of older equipment.

Consistent with the transportation analysis, trip rates were obtained from the Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th edition.[7] The ITE 11th Edition Trip Generation Manual does not provide trip generation rates for a few unique land use designations within the LVSP (ITE 2021). Therefore, custom trip generation rates were developed for the proposed Green Industrial and Playas Renewables land use designations.

CalEEMod default emission factors representing the vehicle mix and emissions for 2050 were used for buildout of the project; for each interim scenario, the appropriate year was selected. As represented in CalEEMod, motor vehicles may be fueled with gasoline, diesel, or alternative fuels, such as electricity.

The default CalEEMod paved road percentage value was adjusted to 85%. All roads used by future developments projects within the Plan Area would be required to be paved, as described in Policy HP-19. Per ICAPCD guidance, a value of 85% accounts for the high levels of entrained dust generated from vehicle travel on paved roadways in the region.

General mobile source assumptions:

- **Vehicle Data.** Trip rates were estimated based on ITE trip rates and data provided by the applicant for the project. Default CalEEMod values were applied for trip lengths.
- **Fleet Mix.** Default CalEEMod values were applied.
- **Vehicle Emission Factors.** Default CalEEMod values were applied.
- **Road Dust.** The default CalEEMod paved road percentage values was adjusted to 85%. All roads used by future developments projects within the Plan Area would be required to be paved. Per ICAPCD guidance, a value of 85% accounts for the high levels of entrained dust generated from vehicle travel on paved roadways in the region.

[7] At the time of the Notice of Preparation, the most recent edition of the Institute of Transportation Engineers (ITE) Trip Generation Manual was the 11th Edition. Since then, the 12th Edition was released, on August 25, 2025, and may contain updated trip generation rates and methodologies relevant to future analyses.

Land uses with alternative mobile source assumptions:

- **Solar, Battery Energy Storage Systems (BESS), Substations, Floatovoltaics, Agrivoltaics, Water Storage Facility:** These land uses would only generate vehicle trips for occasional maintenance. It was conservatively estimated that an average of five workers traveling to the site each week (approximately 520 one-way trips per year) would be required for maintenance at each of these land uses. Assuming a distance of 24 miles per trip, mobile sources would generate approximately 12,514 vehicle miles traveled (VMT). The general mobile sources assumptions listed above were applied for the fleet mix, vehicle emission factors, and road dust inputs. See Appendix B for details.
- **Wholesale Distribution and Logistics and Warehousing:** The ITE trip rate for Land Use Code 154 (High-Cube Transload/Short-Term Storage) was used for both passenger vehicles and trucks. The passenger vehicle trip lengths were assumed to be CalEEMod default trip length of 24.4 miles for commercial-work trips (i.e., trips made by someone who is employed by the Warehouse land use) and assumed to be 55.3% of primary trips for a warehouse with cold storage and 72.5% of primary trips for a warehouse without cold storage. The heavy-duty truck trip lengths were based on the SCAQMD recommendation of 40 miles.[8] Heavy-duty-truck trips were assumed to be 44.7% of primary trips for a warehouse with cold storage and 27.5% of primary trips for a warehouse without cold storage. The mix of vehicle classifications for passenger vehicles and trucks is based on the fleet mix percentages from ITE Land Use Code 154. The general mobile sources assumptions listed above were applied for the vehicle emission factors and road dust inputs. See Appendix B for details.
- **Electrical Vehicle Charging Stations:** Mobile source emissions would result from passenger vehicles and truck traffic traveling to and from the facilities to charge their vehicles. However, combustion emissions are not estimated from the EV trips associated with the EV charging facilities because EVs do not generate combustion emissions. Particulate matter emissions would be generated from the EV trips from tire and brake wear, and these emissions are estimated and included in the analysis. For each operational scenario, the number of vehicle trips was estimated based on the size of the charging station, the type of chargers, the utilization of the chargers, and the mix of vehicle types expected to use the station. These estimates were guided by data and experience from similar projects. See Appendix B for details.

Area Sources

CalEEMod was used to estimate operational emissions from area sources, including emissions from consumer product use, architectural coatings, and landscape maintenance equipment. Emissions associated with natural gas usage in space heating, water heating, and stoves were calculated in the building energy use module of CalEEMod, as described in the following text.

Consumer products are chemically formulated products used by household and institutional consumers, including cleaning supplies, kitchen aerosols, cosmetics, toiletries, and pesticides/fertilizers used at city parks (CAPCOA 2022). Other paint products, furniture coatings, or architectural coatings are not considered consumer products (CAPCOA 2022). Consumer product VOC emissions are estimated in CalEEMod based on the floor area of residential and nonresidential buildings and on the default factor of pounds of VOC per building square foot per day. For the

[8] The average trip length for heavy-duty trucks was based on implementation of the Facility-Based Mobile Source Measures adopted in the South Coast Air Quality Management District (SCAQMD) 2016 AQMP. SCAQMD's Preliminary Warehouse Emission Calculations assumed a heavy-heavy-duty truck trip length of 39.9 miles (SCAQMD 2021). Therefore, the conservatively assumed trip length of 40 miles is used for this analysis.

recreational land uses represented as "city park," CalEEMod estimates VOC emissions associated with the use of pesticides and fertilizers based on square footage and pounds of VOC per square foot per day. For the Asphalt Surface land use, CalEEMod estimates VOC emissions associated with the use of parking surface degreasers based on a square footage of parking surface area and pounds of VOC per square foot per day.

VOC off-gassing emissions result from the evaporation of solvents contained in surface coatings, such as in paints and primers used during building maintenance. CalEEMod calculates the VOC evaporative emissions from application of nonresidential surface coatings based on the VOC emission factor, the building square footage, the assumed fraction of surface area, and the reapplication rate. The VOC emission factor is based on the VOC content of the surface coatings, and ICAPCD Rule 424 (Architectural Coatings) governs the VOC content for interior and exterior coatings. The model default reapplication rate of 10% of area per year is used. Consistent with CalEEMod defaults, it is assumed that the residential surface area for painting equals 2.7 times the floor square footage, and the nonresidential surface area for painting equals 2.0 times the floor square footage, with 75% assumed for interior surface coating and 25% assumed for exterior surface coating. For the other asphalt surfaces, the architectural coating area is assumed to be 6% of the total square footage, consistent with the supporting CalEEMod studies provided as an appendix to the CalEEMod User's Guide (CAPCOA 2022).

Landscape maintenance includes fuel combustion emissions from equipment such as lawn mowers, shredders/grinders, and leaf blowers, which are assumed to be gasoline-fueled. The emissions associated with landscape equipment use are estimated based on CalEEMod default values for emission factors (grams per square foot of nonresidential building space per day) and the number of summer days (when landscape maintenance would generally be performed) and winter days. The CalEEMod default value for the number of summer days was increased to 270 days because the project is in a desert region.

General area source assumptions:

- **Hearths.** Default CalEEMod values were applied.
- **Consumer Products.** Default CalEEMod values were applied.
- **Architectural Coating.** Default CalEEMod values were applied.
- **Landscape Equipment.** 270 summer days were assumed.

Energy Sources

As represented in CalEEMod, energy sources include emissions associated with building electricity and natural gas usage. Electricity use would contribute indirectly to criteria air pollutant emissions; however, the emissions from electricity use are only quantified for GHG emissions in CalEEMod because criteria pollutant emissions would occur at the site of power plants, which are not on the project site. However, natural gas combustion would occur at the project site itself, in association with equipment that uses natural gas.

In CalEEMod 2022.1, the default energy use from nonresidential land uses is based on 2019 consumption estimates from the California Energy Commission (CEC) 2018–2030 Uncalibrated Commercial Sector Forecast (Commercial Forecast), and the energy use from residential land uses is based on the 2019 Residential Appliance Saturation Survey (RASS). The Commercial Forecast and RASS datasets derive the energy intensities of different end-use categories for different land use subtypes for electricity demand forecast zones throughout the state. However, the energy use estimates are based on existing buildings and residences and are not representative of

those constructed in compliance with the energy efficiency requirements of the latest Title 24 Building Energy Efficiency Standards (e.g., the average residence surveyed in the RASS was constructed in 1974). Therefore, per Appendix D, Technical Source Documentation for Emissions Calculations, of the CalEEMod Version 2022.1 User Guide, "the default energy consumption estimates provided in CalEEMod based on the Commercial Forecast and RASS are very conservative, overestimating expected energy use compared to what would be expected for new buildings subject to the latest Energy Code with more stringent energy efficiency measures" (CAPCOA 2022).

Default CalEEMod values were applied for most land uses to calculate criteria air pollutant emissions associated with natural gas and electricity use. Consistent with CalEEMod defaults, the energy associated with parking lots for each land use was assumed to be fully electric, with no natural gas usage. For certain land uses, alternative energy source assumptions were applied in place of CalEEMod defaults, as described below.

Land uses with alternative energy source assumptions:

- **Solar, Substations, Agrivoltaics, Floatovoltaics:** Operation of these land uses would only consume electricity; no natural gas would be consumed. Default natural gas consumption was converted to electricity and is accordingly reflected within CalEEMod. CalEEMod default values were assumed for the amount of energy consumed subject to Title 24 standards.
- **Battery Energy Storage Systems:** BESS sites would only result in auxiliary energy consumption associated with BESS operations, including cooling, metering, controlling, and monitoring; no natural gas would be consumed. Auxiliary energy was assumed to account for 2% of the BESS energy capacity, annually. As such, during Phase 1, approximately 11,680 megawatt-hours (MWh) of auxiliary energy would be consumed annually by BESS sites. During Phase 2, approximately 14,600 MWh of auxiliary energy would be consumed annually. During Phase 3, approximately 18,980 MWh of auxiliary energy would be consumed annually.
- **Electric Vehicle Charging Stations:** EV charging stations would include direct current fast-charging infrastructure for low-density to high-density trucks, as well as personal vehicles; the charging stations would also house solar panels to generate electricity on site. The EV charging stations' electricity demand during each operational scenario was calculated based on a constant of kilowatt-hours (kWh) per acre estimated using previous project experience. Additionally, it was assumed that 10% of the electricity demand would be generated by the on-site solar panels. After accounting for the solar power offsets, the EV charging stations developed in Phase 1 would demand approximately 18.0 million kWh of electricity from the grid, Phase 2 stations would demand approximately 26.1 million kWh of grid electricity, and EV charging stations at total project buildout would demand approximately 28.5 million kWh of grid electricity.
- **Geothermal:** Operation of these land uses would only consume electricity; no natural gas demand was assumed. Default natural gas consumption was converted to electricity and is accordingly reflected within CalEEMod. CalEEMod default values were assumed for the amount of energy consumed subject to Title 24 standards.
- **Data Centers:** Operation of data centers would only consume electricity; no natural gas would be consumed. Based on similar projects, it was assumed that data centers would consume 100 MW per 500,000 building square feet, operating 24 hours per day and 365 days per year. As such, during Phase 1, approximately 3,852,579 MWh of electricity would be consumed annually by data centers. During Phase 2, approximately 4,703,325 MWh of electricity would be consumed annually. During Phase 3, approximately 6,301,225 MWh of electricity would be consumed annually.

Off-Road Equipment

- CalEEMod was used to estimate emissions from operational off-road equipment. The implementation of Program HP-7 would require that all diesel-fueled off-road equipment meet EPA-rated Tier 4 Final engines consistent with CCR Title 13 Section 2449 et seq. Electric or net-zero-emissions equipment is preferred when commercially available and would also meet this requirement. As such, all operational off-road equipment was modeled as Tier 4 Final in CalEEMod. Land uses and their associated off-road equipment assumptions are provided below. Equipment was scaled up based on the growth of building square footage in each phase. See Appendix B for additional details.
- Land uses with off-road equipment assumptions:
- BESS: During maintenance, the project may require the movement or replacement of battery enclosures during the lifetime of the project. As such, the use of a crane was assumed to assist the lifting and movement of the BESS containers. CalEEMod was used to estimate emissions of the crane, assuming 8 hours of operation every 3 years.
- Mineral Recovery, Processing, and Production: Based on the square footage of building space permitted by this land use, forklifts were assumed during operations, based on similar projects. CalEEMod was used to estimate emissions of the forklifts, assuming 8 hours of operation per day for 365 days per year.
- Green Hydrogen: Based on the square footage of building space permitted by this land use, aerial lifts and skid steer loaders were assumed during operations, based on similar projects. CalEEMod was used to estimate emissions of the aerial lifts and skid steer loaders, assuming 1 hour of operation per day for 260 days per year.
- Water Storage Facility: Pumps were assumed during operations. CalEEMod was used to estimate emissions of the pumps, assuming 8 hours of operation per day for 365 days per year.
- Business Industrial Parks, Battery Manufacturing, Automobile Manufacturing, Manufacturing of Green Industrial Equipment: Based on the maximum square footage of building space permitted by these land uses, on-site operational equipment was modeled in CalEEMod assuming 0.12 forklifts per 1,000 square feet operating at 8 hours a day for 260 days of the year (SCAQMD 2014).
- Wholesale Distribution, Logistics and Warehousing: Based on the maximum square footage of building space permitted by these land uses, on-site operational equipment was modeled in CalEEMod assuming 0.12 forklifts per 1,000 square feet and 3.6 yard trucks per 1 million square feet (modeled as rough-terrain forklift in CalEEMod) operating at 24 hours a day for 365 days of the year (SCAQMD 2014).

Table 2-17 shows the off-road equipment assumption by land use by phase for the project.

Table 2-17. Off-Road Equipment Assumptions by Land Use

Land Use Type	Off-Road Equipment Type	Hours per Day	Days per Year	Horsepower	Phase 1 Quantity	Phase 2 Quantity	Phase 3 Quantity
Battery Energy Storage System	Cranes	8	0.33	367	1	1	1
Mineral Recovery, Processing, and Production	Forklifts	8	365	82	7	10	12

Table 2-17. Off-Road Equipment Assumptions by Land Use

Land Use Type	Off-Road Equipment Type	Hours per Day	Days per Year	Horsepower	Phase 1 Quantity	Phase 2 Quantity	Phase 3 Quantity
Battery Manufacturing	Forklifts	8	260	200	253	350	481
Green Hydrogen	Aerial Lifts	1	260	63	2	2	3
	Skid Steer Loaders	1	260	71	2	2	3
Water Storage Facility	Pumps	8	365	500	5	6	12
Business Industrial Parks	Forklifts	8	260	200	71	141	173
Automobile Manufacturing	Forklifts	8	260	200	29	43	70
Manufacturing of Green Industrial Equipment	Forklifts	8	260	200	86	129	211
Wholesale Distribution	Forklifts	24	365	200	182	412	445
	Yard Trucks	24	365	200	5	12	13
Logistics and Warehousing	Forklifts	24	365	200	121	275	297
	Yard Trucks	24	365	200	4	8	9

Source: Appendix B, Operational CalEEMod Files.
Notes: The equipment listed in Table 2-17 was modeled to be Tier 4 within CalEEMod, as required per Program HP-7.

Stationary Equipment

CalEEMod was used to estimate emissions from operational stationary equipment (i.e., emergency generators, fire pumps, and boilers). CalEEMod default emission factors were assumed for the equipment type based on its horsepower. Land uses and their associated emergency generator assumptions are provided in Table 2-18. All emergency generators were assumed to operate for 1 hour per day and 50 hours per year for routine maintenance and testing. See Appendix B for additional details.

Table 2-18. Emergency Generator Assumptions by Land Use

Land Use Type	Horsepower	Phase 1 Quantity	Phase 2 Quantity	Phase 3 Quantity
Solar	500	2	2	2
Battery Energy Storage System	500	1	2	2
Substations	500	1	1	1
Agrivoltaics	500	1	1	1
Floatovoltaics	500	1	1	1
Geothermal	4,300	6	10	12
	3,350	3	5	6
Green Hydrogen	671	3	3	4

Table 2-18. Emergency Generator Assumptions by Land Use

Land Use Type	Horsepower	Phase 1 Quantity	Phase 2 Quantity	Phase 3 Quantity
Mineral Recovery, Processing, and Production	1,100	7	9	11
Data Centers	4,000	147	179	240
Wastewater Treatment Plant	1,500	3	4	5
Emergency Services	500	4	5	6
Research and Development	500	1	2	2
Battery Manufacturing	500	3	3	4
Manufacturing of Green Industrial Equipment	500	1	2	2
Automobile Manufacturing	500	1	1	1
Wholesale Distribution	500	2	4	4
Logistics and Warehousing	500	2	3	3
Business Industrial Park	500	1	2	2

Source: Appendix B, Operational CalEEMod Files.

For the Green Hydrogen land use, in addition to the emergency generators, 335-horsepower diesel fire pumps were assumed to operate for 1 hour per day and 50 hours per year; compressed natural gas boilers with a rating of 10 were assumed to operate with a daily heat input of 240 and an annual heat input of 83,220. In Phases 1 and 2, three diesel fire pumps and three boilers were assumed, and in Phase 3, four diesel fire pumps and four boilers were assumed.

For all other stationary equipment, emissions were calculated in a spreadsheet model. Land uses with alternative stationary equipment assumptions are provided below. See Appendix B for additional details.

Land uses with stationary equipment assumptions outside of CalEEMod:

- **Geothermal/Mineral Recovery, Processing, and Production:** PM_{10} emissions would result from operation of the cooling towers associated with the geothermal and mineral recovery facilities land uses as a result of the total dissolved solids in the circulating water that are carried out with the water entrained in being discharged from the tower (SCAQMD 2022). SCAQMD's Guidelines for Calculating Emissions from Cooling Towers was used to estimate PM_{10} emissions related to cooling towers (SCAQMD 2022). Based on other recent geothermal plants in Imperial County of a scale similar to what is planned for the LVSP, approximately 330 million gallons of water was assumed to be circulated per year for the purposes of estimating PM_{10} emissions. Based on information from the County, 11 cooling towers were assumed to be operational in Phase 1, 15 in Phase 2, and 17 in Phase 3 of the LVSP.
- **Battery Manufacturing:** Criteria air pollutant emissions would result from the use of a variety of stationary source equipment used during the battery manufacturing process, including but not limited to spray booths, ovens, boilers, chillers, and furnaces, Given the variety of potential stationary sources and the limited information on stationary source equipment for the future development of automobile manufacturing within the LVSP area, an emissions inventory from an existing automobile facility was utilized to calculate potential criteria for air pollutant emissions for potential stationary sources by scaling the existing emissions

inventory relative to the proposed automobile manufacturing facilities building square footage for each phase of operation.

- **Anaerobic Digester:** Criteria air pollutant emissions would result from the stationary source equipment, including boilers and biogas flares. Stationary source equipment data was taken from a representative facility in Imperial County. Emissions were calculated using Santa Barbara County Air Pollution Control District's (SBCAPCD's) emission calculation spreadsheets for boilers and flares, which use AP-42 emission factors.
- **Wastewater Treatment Plant:** The wastewater treatment plants would result in VOC off-gassing during treatment processes. VOC and TAC emissions were estimated based on VOC emission factors for the project's wastewater treatment plant and lift station based on San Diego Air Pollution Control District source test data[9] and assuming an annual throughput of about 6,570 million gallons per year in Phase 1, 8.395 million gallons per year in Phase 2, and 11,680 million gallons per year in Phase 3, with TAC speciation per the San Joaquin Valley Air Pollution Control District (SJVAPCD) Emissions from Publicly Owned Treatment Works or Wastewater Treatment Plants calculator.
- **Automobile Manufacturing.** Criteria air pollutant emissions would result from the use of a variety of stationary source equipment used during the automobile manufacturing process, including but not limited to spray booths, ovens, boilers, chillers, and furnaces, Given the variety of potential stationary sources and the limited information on stationary source equipment for the future development of automobile manufacturing within the LVSP area, an emissions inventory from an existing automobile facility was utilized to calculate potential criteria air pollutant emissions for potential stationary sources by scaling the existing emissions inventory relative to the proposed automobile manufacturing facilities' building square footage for each phase of operation

2.3.2.3 Health Risk Assessment

A HRA was performed to evaluate potential health risks associated with construction and operation of the LVSP. The following discussion summarizes the dispersion modeling and HRA methodology; supporting HRA documentation, including detailed assumptions, is presented in Appendix E, Health Risk Assessment.

For risk assessment purposes, PM_{10} in diesel exhaust is considered DPM, originating mainly from off-road equipment operating at a defined location for a given length of time at a given distance from sensitive receptors. Less intensive, more dispersed emissions result from on-road vehicle exhaust (e.g., heavy-duty diesel trucks). For the construction HRA, the CalEEMod scenario was adjusted to reduce diesel truck one-way trip distances to 10 miles to estimate emissions from truck pass-by at proximate receptors.

Air dispersion modeling was performed using EPA's American Meteorological Society/Environmental Protection Agency Regulatory Model (AERMOD) Version 24142 modeling system (computer software). The HRA followed the Office of Environmental Health Hazard Assessment 2015 guidelines (OEHHA 2015) to calculate the health risk impacts at all proximate receptors (on site and off site), as further discussed below. The dispersion modeling included the use of standard regulatory default options. AERMOD parameters were selected consistent with SCAQMD and EPA guidance and identified as representative of the project site and project activities. Principal parameters of this modeling are presented in Table 2-19.

[9] Emissions testing for Encina 1991/1993 and Point Loma 1990/1996 wastewater treatment facilities.

Table 2-19. AERMOD Principle Parameters – Health Risk Assessment

Parameter	Details
Meteorological Data	AERMOD-specific meteorological data for the Imperial County Airport air monitoring station (No. 3144) was used for the dispersion modeling. A meteorological data set from 2015 through 2018 and 2021 was obtained from the California Air Resources Board in a preprocessed format suitable for use in AERMOD (CARB 2025k).
Urban versus Rural Option	The rural option was selected due to the predominant area around the Lithium Valley Specific Plan in accordance with the Auer method for classifying a site as urban or rural as specified in the U.S. Environmental Protection Agency's 40 CFR Part 51, Appendix W.
Terrain Characteristics	The elevation of the site is 200 feet below sea level, and the project site is predominantly flat.
Elevation Data	Digital elevation data were imported into AERMOD, and elevations were assigned to receptors and emission sources, as necessary. Digital elevation data were obtained through the AERMOD View in the United States Geological Survey's National Elevation Dataset format with a resolution of 1 degree (approximately 30 meters).
Source Release Characterizations	Area sources were used to model dispersion of pollutants for each phase of construction and operation due to uncertainty about actual source locations and their actual release parameters. A release height of 11.2 feet was assumed for all area sources. Road and rail emissions were modeled using line volume sources. For roads, a plume height of 6.8 meters, plume width of 8.6 meters, and release height of 3.4 meters was assumed (SBCAPCD 2025). For rail sources, a plume height of 9.7 meters, plume width of 4.05 meters, and release height of 4.85 meters was assumed (Port of Stockton 2021).

Source: See Appendix E, Health Risk Assessment.
Notes: AERMOD = American Meteorological Society/Environmental Protection Agency Regulatory Model.

Discrete receptors were placed over residences in close proximity to the LVSP, and a uniform Cartesian grid of 100-meter spacing was placed over residential neighborhoods in close proximity to the LVSP. There would be on-site receptors during construction and operation of the LVSP, namely residences. There would be temporary housing during construction of each phase. A uniform cartesian grid of 100-meter spacing was placed over phases during construction to represent temporary housing. Permanent housing is also included in the LVSP. A uniform cartesian grid of 100-meter spacing was placed over phases to represent permanent housing. Each phase of construction was modeled separately in AERMOD to account for the movement of temporary residential receptors.

AERMOD was run with all sources emitting unit emissions (1 gram per second) to obtain the necessary input values for CARB's Hotspots Analysis and Reporting Program Version 2. The line of volume sources and area sources were partitioned evenly based on the emission rate of 1 gram per second. The ground-level concentration plot files were then used to estimate the long-term cancer health risk to an individual, as well as the noncancerous acute and chronic health indices.

Cancer risk is defined as the increase in probability (chance) of an individual developing cancer due to exposure to a carcinogenic compound, typically expressed as the increased chances in one million. Maximum Individual Cancer Risk is the estimated probability of a maximally exposed individual potentially contracting cancer as a result of exposure to TACs over a period of 30 years for residential receptor locations. For the construction HRA, the TAC exposure period was assumed to be from third trimester of pregnancy for 10 years for all off-site receptor locations for each phase (i.e., 10 years is the assumed duration of project construction). For on-site exposure, the duration

was assumed to be 10 years for the temporary housing receptors. The permanent housing in Phase 1 would be exposed to 20 years of construction emissions from Phases 2 and 3.

Additionally, the 2022 Title 24 Standards require Minimum Efficiency Reporting Value (MERV) 13 air filters in new construction, which help to capture outdoor air particles. MERV 13 filters have been demonstrated to remove approximately 90% of PM from intake air (Singer et al. 2016). As such, on-site permanent residential health risk assumes the use of MERV 13 filters.

The Office of Environmental Health Hazard Assessment has also established noncarcinogenic risk parameters for use In HRAs because some TACs increase noncancerous health risk due to long-term (chronic) exposures, and some TACs increase noncancerous health risk due to short-term (acute) exposures. Chronic and acute exposure is evaluated in the HRA. Noncarcinogenic risks are quantified by calculating a hazard index, expressed as the ratio between the ambient pollutant concentration and its toxicity or reference exposure level, which is a concentration at or below which health effects are not likely to occur. The chronic hazard index is the sum of the individual substance chronic hazard indices for all TACs affecting the same target organ system. A hazard index of less than 1 means that adverse health effects are not expected.

2.4 Impact Analysis

2.4.1 Would the project conflict with or obstruct implementation of the applicable air quality plan?

ICAPCD Clean Air Plans

The Plan Area is located within the jurisdictional boundaries of ICAPCD, which is responsible for developing and implementing the clean air plans for attainment and maintenance of the NAAQS and CAAQS in the SSAB, including the 2018 PM_{10} Plan and the 2017 Ozone SIP.

The Plan Area is a KGRA, which supports site selection for renewable energy and mineral extraction facilities. The area includes portions of the Salton Sea, agricultural zones, open space, and conservation areas—regions that would require development of infrastructure such as roadways, utilities, and other services to support the County's vision for the area. The Imperial County Land Use Ordinance has regulations for agricultural land that state that "no land shall be removed from the Agricultural designation except for annexation to a city, where needed for use by a public agency, for geothermal purposes, where a mapping error may have occurred or where a clear long-term economic benefit to the County can be demonstrated through the planning and environmental review process."

The basis for the air quality plans is the SCAG population growth projections, which are based in part on the land uses established by local General Plans. In the event a project would result in development that results in greater than anticipated growth projections, the project would result in air pollutant emissions that may not have been accounted for in the air quality plans and thus may obstruct or conflict with the air quality plans. As described below, ICAPCD has implemented plans for meeting state and federal standards of nonattainment pollutants. Relatedly, ICAPCD's air quality attainment plans are based, in part, on regional population and employment projections from SCAG, which is the designated metropolitan planning organization (MPO) for Imperial County.

Similarly, the County 2017 Ozone SIP relies primarily on the land use and population projections provided by SCAG and the CARB on-road emissions forecast as a basis for vehicle emission forecasting (ICAPCD 2017a). The SIP relied on growth projections in SCAG's 2016–2040 RTP/SCS (SCAG 2016). SCAG estimated that unincorporated Imperial County had 16,400 jobs in 2012 and would have 32,300 jobs in 2040, for an additional 15,900 jobs, or 567 jobs per year. Similarly, SCAG estimated that unincorporated Imperial County had a population of 37,700 in 2012 and would have a population of 70,300 in 2040, for an additional 32,600 residents, or 1,165 residents per year.

The LVSP would create an estimated 40,000 jobs in total, and 10,000 of these positions would be temporary, associated primarily with construction, installation, and infrastructure development. However, the lasting impact on population growth would be driven by the estimated 30,000 permanent positions in industries such as renewable energy, lithium extraction, manufacturing, logistics, and commercial sectors. Development of Phase 1 (2035) would create an estimated 15,952 permanent jobs, Phase 2 (2045) would create an additional 11,029 permanent jobs, and Phase 3 (2055) would create an additional 5,575 permanent jobs, for a total of 32,556 jobs. In addition, the LVSP would create an estimated 278 permanent dwelling units at buildout.

Therefore, development facilitated by the LVSP is expected to exceed the projected employment growth in Imperial County, for each phase and at buildout, with the creation of approximately 40,000 jobs, including both temporary and permanent positions. In addition, buildout of the LVSP would create a denser land use pattern by increasing development and employment in the region compared to the existing agricultural uses. As such, the LVSP's increase in employment may conflict with the regional growth projections used to prepare the AQMPs for the SSAB (2018 PM_{10} Plan and 2017 Ozone SIP).

However, development that occurs from implementation of the project would be consistent with SCAG's regional goals of providing infill housing, improving the jobs-to-housing balance, and integrating land uses near major transportation corridors. More specifically, the LVSP includes specific goals and policies to support these regional goals and in turn, improve air quality, as described in Section 4.3.2. These goals and policies are related to planning for optimization of circulation and transportation, sustainable land use and transportation planning, and renewable energy production. Nonetheless, due to the substantial growth in employment, the LVSP may conflict with the regional growth projections used to prepare the applicable air quality plan. Therefore, impacts related to the project's potential to conflict with regional growth projections would be **significant** prior to mitigation.

Implementation of Mitigation Measure (MM)-POP-1 would ensure that the appropriate residential and employment growth projections of the Plan Area would be incorporated into the next SCAG RTP/SCS (anticipated to be the 2028 RTP/SCS). Because SCAG is in process of preparing their next RTP/SCS, and ICAPCD has not identified the next target year for updating the AQMP, there is an anticipated interim period where the SCAG RTP/SCS growth projections and the ICAPCD air quality plans do not reflect the appropriate residential and employment growth at the Plan Area; however, this will eventually be resolved with updates of both plans. Nonetheless, the LVSP would still conflict with the regional growth projections used to prepare the AQMPs for the SSAB. Based on the above considerations, the project would conflict with or obstruct implementation of the applicable air quality plan, and impacts would be **significant and unavoidable**.

Imperial County Air Pollution Control District Community Emissions Reduction Plans

As described in Section 4.3.2, the Imperial County North End Phase 1 Community CERP outlines strategies to reduce emissions in the community (ICAPCD 2025).

The CERP identified Strategy T-1, School Bus Replacement and Infrastructure, which would seek funding opportunities to replace diesel school buses with electric buses and to develop the associated charging infrastructure (ICAPCD 2025). As described in Section 4.3.2, LVSP Policy CT-13, Diverse Modes of Transportation, would require the County to support the diversification of travel modes used in Lithium Valley to increase employee trips made by bicycle or public transit, including new mobility types like electric shuttles, electric vanpool/carpool, electric carsharing service, docked bikeshare, and e-scooter share. Furthermore, the LVSP would support the development of EV charging infrastructure, which would be inclusive of trucks and buses.

In addition, CERP Strategy T-2, Promote Public Transportation, would advocate for service improvements in the North End, such as more frequent stops, reduced fares, and an improved schedule (ICAPCD 2025). Policy CT-19 through Policy CT-23 would be implemented in the LVSP to enhance transit access and connectivity of the project within the County.

The CERP identified that the largest sources of directly emitted $PM_{2.5}$ emissions in the community are from fugitive windblown dust (60%) and dust from vehicle travel on unpaved roads (10%) (ICAPCD 2025). The LVSP would implement Policy HP-18, Dust Suppression, which requires dust control measures that go beyond the minimum requirements of ICAPCD Regulation VIII Rules 800–806 and would reduce project-generated construction dust. As described above, the LVSP would also implement Policy HP-19, Paved Roads, which would reduce dust generation from vehicle travel on unpaved roads.

Furthermore, under Strategy M-1, Fund Paving Projects, ICAPCD proposes to fund paving projects within the North End community (ICAPCD 2025). The LVSP would implement Policy HP-19, Paved Roads, which would require future development within the Plan Area to be accessible by a paved road. This feature would reduce dust generation from vehicle travel on unpaved roads.

Overall, the policies within the LVSP would support the applicable reduction measures outlined within the Imperial County North End Phase 1 Community CERP to reduce emissions and potential health risk to sensitive groups. Therefore, the LVSP would not conflict with the applicable portions of the CERP, and the project's potential impact would be **less than significant**.

Furthermore, under Strategy T-3, Idling Education and Outreach, the ICAPCD proposes to partner with CARB to conduct education and outreach to reduce the amount of idling in the North End Phase 1 Community (ICAPCD 2025). The LVSP would implement MM-AQ-3, Limit Truck and Equipment Idling During Construction; MM-AQ-7, Idling Time Restriction; and MM-AQ-8, Anti-Idling Implementation Measures, which would further reduce the idling time of heavy-duty trucks during construction and operations.

Summary

Based on the above considerations, the project would exceed the growth forecasts used to develop ICACPD's attainment plans. Thus, the project would potentially conflict with or obstruct the applicable air quality plan prior to mitigation, and the impact would be **significant**. Implementation of MM-POP-1, SCAG Coordination and Inclusion in Regional Planning, would ensure that the appropriate residential and employment growth projections of the Plan Area would be incorporated into the next SCAG RTP/SCS (anticipated to be the 2028 RTP/SCS). Nonetheless, the LVSP would still conflict with the regional growth projections used to prepare the AQMPs for the SSAB, and the impact would be **significant and unavoidable**.

Regarding the Imperial County North End Phase 1 Community CERP, the project would not conflict with the applicable portions of the CERP.

Therefore, the project's potential to conflict with or obstruct implementation of the applicable air quality plan would be **significant and unavoidable.**

Level of Significance Before Mitigation

Impacts would be **significant** before mitigation.

Mitigation Measures

The LVSP would implement MM-AQ-1 through MM-AQ-12 and MM-TRA-1 through MM-TRA-4, as detailed in Section 2.4.2 below, and MM-POP-1, as follows.

MM-POP-1 SCAG Coordination and Inclusion in Regional Planning. Prior to recordation of the first final map or issuance of the first development permit (whichever occurs first), the County of Imperial shall submit the final adopted Lithium Valley Specific Plan to the Southern California Association of Governments for inclusion in regional planning documents, including the Regional Transportation Plan/Sustainable Communities Strategy and the Regional Housing Needs Assessment, as applicable. This action shall ensure that the employment and associated population growth facilitated by the Lithium Valley Specific Plan is recognized and incorporated into regional forecasts.[10]

MM-POP-1 is not a quantifiable measure.

Level of Significance After Mitigation

Based on the above considerations, the project would exceed the growth forecasts used to develop ICACPD's attainment plans. Thus, the project would potentially conflict with or obstruct the applicable air quality plan prior to mitigation. Implementation of MM-POP-1 would ensure that the appropriate residential and employment growth projections of the Plan Area would be incorporated into the next SCAG RTP/SCS (anticipated to be the 2028 RTP/SCS). Nonetheless, the LVSP would still conflict with the regional growth projections used to prepare the AQMPs for the SSAB.

Regarding the Imperial County North End Phase 1 Community CERP, the project would not conflict with the applicable portions of the CERP,

Therefore, the project's potential to conflict with or obstruct implementation of the applicable air quality plan would be **significant and unavoidable.**

[10] The updated information provided to SCAG is anticipated be used by ICAPCD to update the AQMP. The applicant shall prepare and submit a letter notifying ICAPCD of this revised forecast for use in the future updates to the plan, as required.

2.4.2 Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

By its nature, air pollution is largely a cumulative impact. The nonattainment status of regional pollutants is a result of past and present development, and ICAPCD develops and implements plans for future attainment of ambient air quality standards. Based on these considerations, project-level thresholds of significance for criteria pollutants are used in the determination of whether a project's individual emissions would have a cumulatively considerable contribution to air quality. If a project's emissions would exceed the applicable significance thresholds, it would have a cumulatively considerable contribution. Conversely, projects that do not exceed the project-specific thresholds are generally not considered to be cumulatively significant.

As discussed previously, the SSAB has been designated a national nonattainment area for O_3 and PM_{10} and a California nonattainment area for O_3, PM_{10}, and $PM_{2.5}$. Construction and operation of the project would result in emissions of criteria air pollutants, which may result in a cumulatively considerable increase in emissions of criteria air pollutants for which the SSAB is designated as nonattainment under the NAAQS or CAAQS. The following discussion quantitatively evaluates potential short-term construction and long-term operational impacts that would result from implementation of the project.

Construction Emissions

Proposed construction activities would result in the temporary addition of pollutants to the local airshed caused by on-site sources (i.e., off-road construction equipment, soil disturbance, and VOC off-gassing from architectural coatings and asphalt pavement application) and off-site sources (i.e., on-road haul trucks, delivery trucks, and worker vehicle trips). Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of operation, and, for dust, the prevailing weather conditions. Therefore, such emissions levels can only be estimated, with a corresponding uncertainty in precise ambient air quality impacts.

As discussed in Section 2.3.2.1, Construction Emissions, criteria air pollutant emissions associated with temporary construction activity were quantified using CalEEMod, based on the construction information presented in Table 2-20, including phase type, duration, and sequencing, were based on CalEEMod defaults for a compressed 10-year construction period for each phase of the project and are intended to represent a reasonable scenario based on the best information available. Default values provided in CalEEMod were used where detailed project information was not available.

Implementation of the project would generate criteria air pollutant emissions from entrained dust, off-road equipment, vehicle emissions, architectural coatings, and asphalt pavement application. Entrained dust results from the exposure of earth surfaces to wind from the direct disturbance and movement of soil, resulting in PM_{10} and $PM_{2.5}$ emissions. The project would implement Policy HP-18, Dust Suppression, which goes beyond the requirements of ICAPCD Regulation VIII to control dust emissions generated during construction activities. Per Policy HP-18, construction practices that were assumed to be employed to reduce fugitive dust emissions and were quantified in CalEEMod include watering of the active sites three times per day depending on weather conditions,

watering of unpaved roads twice per day, limiting vehicle speeds on unpaved roads to 25 miles per hour, and sweeping paved roads once per month.

Internal combustion engines used by construction equipment, haul trucks, vendor trucks (i.e., delivery trucks), and worker vehicles would result in emissions of VOCs, NO_x, CO, PM_{10}, and $PM_{2.5}$. The project would implement Program HP-7, Equipment Exhaust Minimization, which includes specific engine efficiency requirements for off-road equipment used during construction. The application of architectural coatings, such as exterior and interior paint and other finishes, and application of asphalt pavement would also produce VOC emissions; however, the contractor would be required to procure architectural coatings from a supplier in compliance with the requirements of ICAPCD Rule 424 (Architectural Coatings).

Construction emissions were calculated for the estimated worst-case day over the construction period associated with each phase and reported as the maximum daily emissions estimated during each year of construction (2025 through 2054). Table 2-20 presents the estimated maximum daily construction emissions generated during construction of the project. "Summer" emissions are representative of the conditions that may occur during the O_3 season (May 1 to October 31), and "winter" emissions are representative of the conditions that may occur during the balance of the year (November 1 to April 30). Reductions to construction emissions from the implementation of Program HP-7 and Policy HP-18 are reflected in Table 2-20. Details of the emission calculations are provided in Appendix A.

Table 2-20. Estimated Maximum Daily Construction Criteria Air Pollutant Emissions

Year	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
	Pounds Per Day					
Summer						
Phase 1						
2025	227.42	352.63	2,310.70	2.87	136,079.32	13,633.61
2026	227.19	363.36	2,387.38	3.10	137,209.82	13,746.98
2027	224.33	355.33	2,299.35	3.10	137,209.82	13,746.98
2028	217.80	347.94	2,236.25	3.04	137,209.82	13,746.98
2029	215.06	340.50	2,174.05	3.04	137,209.82	13,746.98
2030	212.89	333.06	2,119.78	3.04	137,209.82	13,746.98
2031	209.56	321.42	2,023.58	2.98	136,690.55	13,695.01
2032	207.52	315.36	1,981.08	2.98	136,690.55	13,695.01
2033	217.10	309.54	1,942.58	2.98	137,462.02	13,771.96
2034	214.82	299.58	1,819.43	2.87	137,462.02	13,771.96
Phase 2						
2035	103.58	114.13	606.68	0.95	60,548.60	6,056.66
2036	105.92	133.12	746.98	1.18	61,855.87	6,187.64
2037	105.42	130.92	736.70	1.18	61,855.60	6,187.64
2038	104.80	130.49	729.37	1.18	61,855.60	6,187.64
2039	104.13	130.05	720.87	1.18	61,855.60	6,187.64
2040	103.74	129.67	715.23	1.18	61,855.60	6,187.64
2041	101.49	102.01	608.65	1.02	60,117.55	6,013.72

Table 2-20. Estimated Maximum Daily Construction Criteria Air Pollutant Emissions

Year	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
	Pounds Per Day					
2042	99.64	101.70	603.60	1.02	60,117.55	6,013.72
2043	106.74	101.31	600.12	1.02	60,331.49	6,034.65
2044	106.50	91.21	512.32	0.89	60,331.49	6,034.65
Phase 3						
2045	71.02	97.28	496.34	0.86	41,658.95	4,170.02
2046	73.65	116.70	647.36	1.10	42,966.22	4,301.00
2047	73.58	116.67	646.07	1.10	42,966.22	4,301.00
2048	72.51	96.20	590.37	0.99	41,776.07	4,181.92
2049	72.39	96.20	589.25	0.99	41,776.07	4,181.92
2050	72.62	96.47	591.57	0.99	41,776.07	4,181.92
2051	71.83	91.21	547.33	0.93	41,256.80	4,129.94
2052	71.77	91.19	546.21	0.93	41,256.80	4,129.94
2053	75.96	91.19	546.07	0.93	41,262.29	4,130.28
2054	75.85	80.20	460.41	0.80	41,262.29	4,130.28
Winter						
Phase 1						
2025	214.95	373.28	1,884.05	2.87	136,079.32	13,633.61
2026	215.69	379.96	1,988.88	3.10	137,209.82	13,746.98
2027	210.55	371.45	1,934.46	3.10	137,209.82	13,746.98
2028	208.16	363.36	1,898.79	3.10	137,209.82	13,746.98
2029	206.55	351.87	1,863.24	3.04	137,209.82	13,746.98
2030	205.06	344.54	1,832.36	3.04	137,209.82	13,746.98
2031	202.75	332.65	1,757.48	2.98	136,690.55	13,695.01
2032	197.64	326.18	1,734.87	2.98	136,690.55	13,695.01
2033	211.29	319.77	1,713.01	2.98	137,462.02	13,771.96
2034	210.00	306.89	1,607.59	2.87	137,462.02	13,771.96
Phase 2						
2035	101.56	118.86	519.07	0.95	60,548.60	6,056.66
2036	104.19	136.34	661.51	1.18	61,855.87	6,187.64
2037	103.60	135.61	655.60	1.18	61,855.60	6,187.64
2038	103.35	134.96	651.29	1.18	61,855.60	6,187.64
2039	102.85	132.94	647.24	1.18	61,855.60	6,187.64
2040	100.99	132.59	643.07	1.18	61,855.60	6,187.64
2041	98.87	106.22	540.80	1.02	60,117.55	6,013.72
2042	98.71	105.91	538.68	1.02	60,117.55	6,013.72
2043	105.84	103.99	536.75	1.02	60,331.49	6,034.65
2044	105.73	94.16	450.99	0.89	60,331.49	6,034.65

Table 2-20. Estimated Maximum Daily Construction Criteria Air Pollutant Emissions

Year	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
	Pounds Per Day					
Phase 3						
2045	70.46	99.28	454.14	0.86	41,658.95	4,170.02
2046	73.04	118.92	603.46	1.10	42,966.22	4,301.00
2047	73.03	118.82	603.24	1.10	42,966.22	4,301.00
2048	71.89	97.88	547.10	0.99	41,776.07	4,181.92
2049	71.88	97.86	546.92	0.99	41,776.07	4,181.92
2050	72.08	98.13	548.37	0.99	41,776.07	4,181.92
2051	71.25	93.07	504.80	0.93	41,256.80	4,129.94
2052	71.24	93.05	504.61	0.93	41,256.80	4,129.94
2053	75.34	92.87	503.49	0.93	41,262.29	4,130.28
2054	75.34	82.06	419.35	0.80	41,262.29	4,130.28
Maximum Daily Emissions	***227.42***	***379.96***	***2,387.38***	***3.10***	***137,462.02***	***13,771.96***
ICAPCD Threshold	75	100	550	150	150	55
Threshold Exceeded?	**Yes**	**Yes**	**Yes**	No	**Yes**	**Yes**

Source: Appendix A, Construction CalEEMod Files.
Notes: VOC = volatile organic compound; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter; ICAPCD = Imperial County Air Pollution Control District.
Emissions reflect the implementation of Program HP-7 and Policy HP-18 during construction.

As shown in Table 2-20, emissions resulting from project construction would exceed the criteria pollutant thresholds established by ICAPCD for VOC, NO_x, CO, PM_{10}, and $PM_{2.5}$ emissions. This impact would be **significant** without mitigation.

Several mitigation measures have been identified that would reduce the project's construction criteria air pollutant emissions to the extent feasible (see MM-AQ-1 through MM-AQ-4). However, the emission reduction benefits of these mitigation measures are not readily quantifiable, and thus, mitigated emissions are not presented herein. Further, the magnitude of emission reductions attributable to these mitigation measures is not expected to reduce project emissions attributable to operational activities below ICAPCD's numerical thresholds of significance.

Because the project-generated operational emissions of VOCs, NO_x, CO, PM_{10}, and $PM_{2.5}$ would exceed the ICAPCD thresholds, the project would potentially result in a cumulatively considerable increase in emissions of nonattainment pollutants. Therefore, the project's cumulative air quality impact from construction emissions would be **significant and unavoidable**.

Operational Emissions

Operation of the project would generate VOC, NO_x, CO, SO_x, PM_{10}, and $PM_{2.5}$ emissions from mobile sources, including vehicular traffic generated by residents, employees, customers, visitors, trucks, and trains; energy sources

from natural gas usage; area sources, including the use of landscaping equipment, consumer products, and architectural coatings, off-road equipment, and stationary equipment. As discussed in Section 2.3.2.2, Operational Emissions, pollutant emissions associated with long-term operations were quantified using CalEEMod and spreadsheet models using a combination of project-specific information and CalEEMod default values.

The LVSP would implement Program HP-7, which requires that all diesel-fueled off-road equipment shall meet EPA-rated Tier 4 Final engines consistent with 13 CCR Section 2449 et seq. Electric or net-zero-emissions equipment is preferred when commercially available and would also meet this requirement. In addition, the LVSP would implement Policy HP-19, Paved Roads, which requires the County to ensure that all future development projects within the Plan Area are accessible by a paved road prior to providing a certificate of occupancy.

Table 2-21 shows the maximum daily summer and winter criteria air pollutant emissions associated with interim project operation for each land use after Phase 1 construction (year 2035). "Summer" emissions are representative of the project operations anticipated to occur during the O_3 season (May 1 to October 31), and "winter" emissions are representative of the project operations anticipated to occur during the balance of the year (November 1 to April 30).Tables 2-21 through Table 2-24 include the emissions reductions resulting from the implementation of Program HP-7. Details of the emission calculations are provided in Appendix B.

Table 2-21. Estimated Maximum Daily Interim Operational Criteria Air Pollutant Emissions by Land Use – Phase 1 (2035) – Unmitigated

Emissions Source	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
	Pounds per Day					
Solar						
Total Maximum Daily Summer Emissions	10.70	4.70	16.33	0.01	5.65	0.80
Total Maximum Daily Winter Emissions	8.72	4.60	4.26	0.01	5.63	0.78
Substations						
Total Maximum Daily Summer Emissions	17.75	0.20	22.34	0.00	5.43	0.57
Total Maximum Daily Winter Emissions	14.10	0.01	0.08	0.00	5.39	0.54
Battery Energy Storage Systems						
Total Maximum Daily Summer Emissions	31.06	0.84	46.12	0.01	5.48	0.62

Table 2-21. Estimated Maximum Daily Interim Operational Criteria Air Pollutant Emissions by Land Use – Phase 1 (2035) – Unmitigated

Emissions Source	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
	Pounds per Day					
Total Maximum Daily Winter Emissions	24.30	0.50	4.96	0.01	5.41	0.56
Agrivoltaics						
Total Maximum Daily Summer Emissions	0.34	0.01	0.56	0.00	5.39	0.54
Total Maximum Daily Winter Emissions	0.26	0.01	0.08	0.00	5.39	0.54
Floatovoltaics						
Total Maximum Daily Summer Emissions	0.34	0.01	0.56	0.00	5.39	0.54
Total Maximum Daily Winter Emissions	0.26	0.01	0.08	0.00	5.39	0.54
Restoration/Passive Uses						
Total Maximum Daily Summer Emissions	—	—	—	—	—	—
Total Maximum Daily Winter Emissions	—	—	—	—	—	—
Parks						
Total Maximum Daily Summer Emissions	1.70	0.49	6.19	0.02	266.15	26.73
Total Maximum Daily Winter Emissions	1.64	0.55	3.97	0.02	266.15	26.73

Table 2-21. Estimated Maximum Daily Interim Operational Criteria Air Pollutant Emissions by Land Use – Phase 1 (2035) – Unmitigated

Emissions Source	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
	Pounds per Day					
Housing						
Total Maximum Daily Summer Emissions	—	—	—	—	—	—
Total Maximum Daily Winter Emissions	—	—	—	—	—	—
Temporary Workforce Housing						
Total Maximum Daily Summer Emissions	27.87	13.16	215.50	0.43	6,446.05	647.47
Total Maximum Daily Winter Emissions	20.56	14.18	100.75	0.37	6,446.02	647.45
Workforce Training						
Total Maximum Daily Summer Emissions	2.67	1.80	22.88	0.06	911.39	91.55
Total Maximum Daily Winter Emissions	2.18	2.00	13.68	0.05	911.38	91.55
Public Transit Hub						
Total Maximum Daily Summer Emissions	6.14	5.33	67.60	0.19	2,810.14	282.27
Total Maximum Daily Winter Emissions	5.09	6.00	42.04	0.16	2,810.14	282.26
Research and Development						
Total Maximum Daily Summer Emissions	65.07	45.98	557.94	1.48	22,177.97	2,227.91

Table 2-21. Estimated Maximum Daily Interim Operational Criteria Air Pollutant Emissions by Land Use – Phase 1 (2035) – Unmitigated

Emissions Source	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
	Pounds per Day					
Total Maximum Daily Winter Emissions	53.36	51.01	335.03	1.30	22,177.91	2,227.85
Commercial						
Total Maximum Daily Summer Emissions	95.54	68.78	780.28	2.00	29,863.91	2,999.64
Total Maximum Daily Winter Emissions	78.49	76.36	529.65	1.76	29,863.89	2,999.63
Emergency Services						
Total Maximum Daily Summer Emissions	25.77	24.47	178.30	0.47	6,514.91	655.03
Total Maximum Daily Winter Emissions	21.57	25.91	108.20	0.41	6,514.89	655.01
Geothermal						
Total Maximum Daily Summer Emissions	341.87	318.55	1,041.71	1.92	24,622.30	2,452.25
Total Maximum Daily Winter Emissions	283.23	321.65	513.32	1.70	24,621.72	2,451.81
Mineral Recovery, Processing, and Production						
Total Maximum Daily Summer Emissions	120.96	90.59	374.09	0.76	8,207.08	827.67
Total Maximum Daily Winter Emissions	98.09	91.50	178.86	0.69	8,206.86	827.50

Table 2-21. Estimated Maximum Daily Interim Operational Criteria Air Pollutant Emissions by Land Use – Phase 1 (2035) – Unmitigated

Emissions Source	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
	Pounds per Day					
Battery Manufacturing						
Total Maximum Daily Summer Emissions	313.84	161.98	1,496.16	5.75	37,450.01	3,768.91
Total Maximum Daily Winter Emissions	289.54	170.25	1,092.31	5.44	37,449.85	3,768.79
Green Hydrogen						
Total Maximum Daily Summer Emissions	59.65	33.62	239.07	0.77	3,794.80	387.51
Total Maximum Daily Winter Emissions	49.09	34.04	148.93	0.74	3,794.69	387.43
Anaerobic Digestor						
Total Maximum Daily Summer Emissions	38.28	20.80	148.56	12.12	2,300.00	234.91
Total Maximum Daily Winter Emissions	37.36	21.34	127.25	12.11	2,299.99	234.91
Wastewater Treatment Plant						
Total Maximum Daily Summer Emissions	38.74	58.96	328.57	0.89	12,717.30	1,278.50
Total Maximum Daily Winter Emissions	33.63	61.93	210.55	0.79	12,717.28	1,278.48
Water Storage Facility						
Total Maximum Daily Summer Emissions	1.88	8.49	84.96	0.00	5.71	0.87

Table 2-21. Estimated Maximum Daily Interim Operational Criteria Air Pollutant Emissions by Land Use – Phase 1 (2035) – Unmitigated

Emissions Source	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
	Pounds per Day					
Total Maximum Daily Winter Emissions	1.88	8.49	84.91	0.00	5.71	0.87
Data Centers						
Total Maximum Daily Summer Emissions	919.85	3,743.89	2,410.69	4.55	8,268.09	940.88
Total Maximum Daily Winter Emissions	902.13	3,745.05	2,247.17	4.48	8,267.92	940.76
Business Industrial Parks						
Total Maximum Daily Summer Emissions	30.28	25.58	264.78	0.56	4,535.39	456.24
Total Maximum Daily Winter Emissions	24.95	26.46	201.39	0.52	4,535.35	456.21
Automobile Manufacturing						
Total Maximum Daily Summer Emissions	58.10	20.37	167.33	0.40	4,253.50	427.75
Total Maximum Daily Winter Emissions	55.34	21.31	121.46	0.36	4,253.48	427.73
Manufacturing of Green Industrial						
Total Maximum Daily Summer Emissions	48.56	48.10	493.04	1.18	12,760.02	1,282.75
Total Maximum Daily Winter Emissions	40.28	50.92	355.43	1.08	12,759.97	1,282.71

Table 2-21. Estimated Maximum Daily Interim Operational Criteria Air Pollutant Emissions by Land Use – Phase 1 (2035) – Unmitigated

Emissions Source	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
	Pounds per Day					
Wholesale Distribution						
Total Maximum Daily Summer Emissions	77.24	170.40	1,226.69	2.82	6,928.81	702.06
Total Maximum Daily Winter Emissions	65.82	175.33	1,124.36	2.78	6,928.70	701.97
Logistics and Warehousing						
Total Maximum Daily Summer Emissions	52.14	115.68	824.69	1.89	4,619.31	468.14
Total Maximum Daily Winter Emissions	44.53	118.97	756.47	1.86	4,619.23	468.08
Outdoor Storage of Trucks, Shipping Containers, etc.						
Total Maximum Daily Summer Emissions	0.45	0.20	2.49	0.01	106.89	10.74
Total Maximum Daily Winter Emissions	0.43	0.22	1.59	0.01	106.89	10.74
Intermodal Rail Hub						
Total Maximum Daily Summer Emissions	39.90	151.64	381.54	0.75	2,428.57	247.05
Total Maximum Daily Winter Emissions	33.89	151.94	328.39	0.74	2,428.51	247.01
Electric Vehicle Charging Stations						
Total Maximum Daily Summer Emissions	0.78	0.00	0.00	0.00	11,248.45	1,131.98

Table 2-21. Estimated Maximum Daily Interim Operational Criteria Air Pollutant Emissions by Land Use – Phase 1 (2035) – Unmitigated

Emissions Source	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
	Pounds per Day					
Total Maximum Daily Winter Emissions	0.78	0.00	0.00	0.00	11,248.45	1,131.98
Total Phase 1 Maximum Daily Summer Emissions	**2,427.46**	**5,134.64**	**11,398.95**	**39.04**	**213,264.10**	**21,551.87**
Total Phase 1 Maximum Daily Winter Emissions	**2,191.49**	**5,180.55**	**8,635.16**	**37.39**	**213,262.18**	**21,550.42**

Source: See Appendix B, Operational CalEEMod Files, for complete results.
Notes: VOC = volatile organic compound; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter; — = value not available.
Emissions shown in Table 2-21 reflect the implementation of Program HP-7 and Policy HP-19 during operation.

Table 2-22 shows the unmitigated maximum daily summer and winter criteria air pollutant emissions associated with interim project operation for each land use after Phase 2 construction (year 2045).

Table 2-22. Estimated Maximum Daily Interim Operational Criteria Air Pollutant Emissions by Land Use – Phase 2 (2045) – Unmitigated

Emissions Source	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
	Pounds per Day					
Solar						
Total Maximum Daily Summer Emissions	21.17	4.81	30.22	0.01	5.68	0.82
Total Maximum Daily Winter Emissions	16.91	4.60	4.25	0.01	5.63	0.78
Substations						
Total Maximum Daily Summer Emissions	22.04	2.54	30.37	0.01	5.56	0.70
Total Maximum Daily Winter Emissions	17.41	2.30	2.16	0.00	5.51	0.66

Table 2-22. Estimated Maximum Daily Interim Operational Criteria Air Pollutant Emissions by Land Use – Phase 2 (2045) – Unmitigated

Emissions Source	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
	Pounds per Day					
Battery Energy Storage Systems						
Total Maximum Daily Summer Emissions	43.15	3.26	63.17	0.02	5.63	0.76
Total Maximum Daily Winter Emissions	33.93	2.79	7.04	0.01	5.53	0.68
Agrivoltaics						
Total Maximum Daily Summer Emissions	0.33	0.01	0.54	0.00	5.39	0.54
Total Maximum Daily Winter Emissions	0.26	0.01	0.07	0.00	5.39	0.54
Floatovoltaics						
Total Maximum Daily Summer Emissions	1.15	2.31	2.63	0.00	5.51	0.66
Total Maximum Daily Winter Emissions	1.08	2.30	2.16	0.00	5.51	0.66
Restoration/Passive Uses						
Total Maximum Daily Summer Emissions	—	—	—	—	—	—
Total Maximum Daily Winter Emissions	—	—	—	—	—	—
Parks						
Total Maximum Daily Summer Emissions	3.13	0.85	10.30	0.03	514.92	51.72

Table 2-22. Estimated Maximum Daily Interim Operational Criteria Air Pollutant Emissions by Land Use – Phase 2 (2045) – Unmitigated

Emissions Source	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
	Pounds per Day					
Total Maximum Daily Winter Emissions	3.04	0.95	6.62	0.03	514.92	51.72
Housing						
Total Maximum Daily Summer Emissions	10.40	8.03	91.08	0.24	3,629.47	364.66
Total Maximum Daily Winter Emissions	8.31	8.65	49.47	0.21	3,629.46	364.65
Temporary Workforce Housing						
Total Maximum Daily Summer Emissions	47.53	27.84	288.85	0.67	9,451.92	950.13
Total Maximum Daily Winter Emissions	37.84	29.01	131.57	0.59	9,451.88	950.10
Workforce Training						
Total Maximum Daily Summer Emissions	6.56	4.51	55.50	0.16	2,538.36	254.98
Total Maximum Daily Winter Emissions	5.43	5.00	32.88	0.14	2,538.36	254.97
Public Transit Hub						
Total Maximum Daily Summer Emissions	14.41	13.33	162.74	0.50	7,818.26	785.30
Total Maximum Daily Winter Emissions	12.19	14.88	100.83	0.44	7,818.25	785.30

Table 2-22. Estimated Maximum Daily Interim Operational Criteria Air Pollutant Emissions by Land Use – Phase 2 (2045) – Unmitigated

Emissions Source	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
	Pounds per Day					
Research and Development						
Total Maximum Daily Summer Emissions	78.69	58.11	662.04	1.93	30,143.57	3,028.15
Total Maximum Daily Winter Emissions	65.41	63.87	394.53	1.70	30,143.48	3,028.08
Commercial						
Total Maximum Daily Summer Emissions	211.31	177.63	1,866.50	5.32	82,866.05	8,323.31
Total Maximum Daily Winter Emissions	179.57	196.35	1,263.15	4.69	82,866.00	8,323.27
Emergency Services						
Total Maximum Daily Summer Emissions	32.00	30.79	215.33	0.61	8,967.90	901.61
Total Maximum Daily Winter Emissions	27.00	32.45	129.39	0.54	8,967.87	901.58
Geothermal						
Total Maximum Daily Summer Emissions	483.86	510.26	1,389.30	2.66	34,392.93	3,432.24
Total Maximum Daily Winter Emissions	404.43	513.33	690.53	2.38	34,392.12	3,431.63
Mineral Recovery, Processing, and Production						
Total Maximum Daily Summer Emissions	164.11	121.16	483.17	1.03	11,444.64	1,154.08

Table 2-22. Estimated Maximum Daily Interim Operational Criteria Air Pollutant Emissions by Land Use – Phase 2 (2045) – Unmitigated

Emissions Source	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
	Pounds per Day					
Total Maximum Daily Winter Emissions	133.22	122.02	224.38	0.93	11,444.32	1,153.84
Battery Manufacturing						
Total Maximum Daily Summer Emissions	415.46	211.37	1,899.33	7.80	51,796.76	5,212.17
Total Maximum Daily Winter Emissions	386.37	220.94	1,401.68	7.41	51,796.53	5,212.42
Green Hydrogen						
Total Maximum Daily Summer Emissions	67.25	36.20	252.70	0.82	4,474.97	455.98
Total Maximum Daily Winter Emissions	55.19	36.54	151.63	0.78	4,474.84	455.89
Anaerobic Digestor						
Total Maximum Daily Summer Emissions	37.50	20.36	141.12	12.12	2,300.01	234.92
Total Maximum Daily Winter Emissions	36.78	20.81	122.52	12.10	2,300.01	234.91
Wastewater Treatment Plant						
Total Maximum Daily Summer Emissions	45.05	74.66	375.58	1.11	16,596.80	1,668.53
Total Maximum Daily Winter Emissions	39.84	77.94	241.07	0.99	16,596.77	1,668.51

Table 2-22. Estimated Maximum Daily Interim Operational Criteria Air Pollutant Emissions by Land Use – Phase 2 (2045) – Unmitigated

Emissions Source	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
	Pounds per Day					
Water Storage Facility						
Total Maximum Daily Summer Emissions	2.30	10.19	101.91	0.00	5.78	0.93
Total Maximum Daily Winter Emissions	2.30	10.19	101.87	0.00	5.78	0.93
Data Centers						
Total Maximum Daily Summer Emissions	1,276.81	5,271.91	3,311.77	6.28	10,117.09	1,171.79
Total Maximum Daily Winter Emissions	1,256.04	5,272.97	3,123.84	6.20	10,116.89	1,171.63
Business Industrial Parks						
Total Maximum Daily Summer Emissions	57.25	49.15	497.52	1.09	9,038.90	909.27
Total Maximum Daily Winter Emissions	47.43	50.57	381.82	1.02	9,038.81	909.21
Automobile Manufacturing						
Total Maximum Daily Summer Emissions	84.61	26.54	229.20	0.56	6,378.45	641.32
Total Maximum Daily Winter Emissions	81.01	27.56	167.43	0.51	6,378.42	641.29
Manufacturing of Green Industrial						
Total Maximum Daily Summer Emissions	66.70	69.58	678.51	1.72	19,135.27	1,923.69

Table 2-22. Estimated Maximum Daily Interim Operational Criteria Air Pollutant Emissions by Land Use – Phase 2 (2045) – Unmitigated

Emissions Source	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
	Pounds per Day					
Total Maximum Daily Winter Emissions	55.96	73.11	494.65	1.57	19,135.19	1,923.63
Wholesale Distribution						
Total Maximum Daily Summer Emissions	172.15	369.66	2,752.41	6.22	15,701.05	1,590.59
Total Maximum Daily Winter Emissions	146.83	379.02	2,531.17	6.14	15,700.78	1,590.39
Logistics and Warehousing						
Total Maximum Daily Summer Emissions	115.08	247.39	1,837.47	4.15	10,467.41	1,060.44
Total Maximum Daily Winter Emissions	98.20	253.63	1,689.98	4.10	10,467.24	1,060.30
Outdoor Storage of Trucks, Shipping Containers, etc.						
Total Maximum Daily Summer Emissions	1.20	0.51	6.20	0.02	309.90	31.13
Total Maximum Daily Winter Emissions	1.15	0.57	3.98	0.02	309.90	31.13
Intermodal Rail Hub						
Total Maximum Daily Summer Emissions	79.45	156.26	756.97	1.49	5,499.34	556.01
Total Maximum Daily Winter Emissions	66.31	156.76	642.98	1.44	5,499.20	555.91

Table 2-22. Estimated Maximum Daily Interim Operational Criteria Air Pollutant Emissions by Land Use – Phase 2 (2045) – Unmitigated

Emissions Source	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
	Pounds per Day					
Electric Vehicle Charging Stations						
Total Maximum Daily Summer Emissions	2.26	0.00	0.00	0.00	30,416.31	3,060.56
Total Maximum Daily Winter Emissions	2.26	0.00	0.00	0.00	30,416.31	3,060.56
Total Phase 2 Maximum Daily Summer Emissions	**3,562.94**	**7,509.21**	**18,192.44**	**56.57**	**374,033.83**	**37,766.99**
Total Phase 2 Maximum Daily Winter Emissions	**3,221.68**	**7,579.13**	**14,093.62**	**53.96**	**374,030.90**	**37,765.19**

Source: See Appendix B, Operational CalEEMod Files, for complete results.
Notes: VOC = volatile organic compound; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter; — = value not available.
<0.01 = reported value less than 0.01.
Emissions shown in Table 2-22 reflect the implementation of Program HP-7 and Policy HP-19 during operation.

Table 2-23 shows the unmitigated maximum daily summer and winter criteria air pollutant emissions associated with interim project operation for each land use after Phase 3 construction (year 2055)

Table 2-23. Estimated Maximum Daily Operational Criteria Air Pollutant Emissions by Land Use – Buildout (2055) – Unmitigated

Emissions Source	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
	Pounds per Day					
Solar						
Total Maximum Daily Summer Emissions	21.89	4.82	31.17	0.01	5.68	0.82
Total Maximum Daily Winter Emissions	17.47	4.60	4.25	0.01	5.63	0.78

Table 2-23. Estimated Maximum Daily Operational Criteria Air Pollutant Emissions by Land Use – Buildout (2055) – Unmitigated

Emissions Source	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
	Pounds per Day					
Substations						
Total Maximum Daily Summer Emissions	26.01	0.30	34.64	0.00	5.45	0.59
Total Maximum Daily Winter Emissions	20.33	0.01	0.07	0.00	5.39	0.54
Battery Energy Storage Systems						
Total Maximum Daily Summer Emissions	56.91	3.42	81.44	0.02	5.66	0.78
Total Maximum Daily Winter Emissions	44.69	2.79	7.04	0.01	5.53	0.68
Agrivoltaics						
Total Maximum Daily Summer Emissions	—	—	—	—	—	—
Total Maximum Daily Winter Emissions	—	—	—	—	—	—
Floatovoltaics						
Total Maximum Daily Summer Emissions	1.15	2.31	2.63	0.00	5.51	0.66
Total Maximum Daily Winter Emissions	1.08	2.30	2.16	0.00	5.51	0.66
Restoration/Passive Uses						
Total Maximum Daily Summer Emissions	—	—	—	—	—	—

Table 2-23. Estimated Maximum Daily Operational Criteria Air Pollutant Emissions by Land Use – Buildout (2055) – Unmitigated

Emissions Source	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
	Pounds per Day					
Total Maximum Daily Winter Emissions	—	—	—	—	—	—
Parks						
Total Maximum Daily Summer Emissions	3.09	0.81	10.04	0.03	514.92	51.72
Total Maximum Daily Winter Emissions	3.02	0.91	6.43	0.03	514.92	51.72
Housing						
Total Maximum Daily Summer Emissions	9.95	6.98	87.92	0.23	3,629.40	364.56
Total Maximum Daily Winter Emissions	7.93	7.63	47.07	0.20	3,629.39	364.56
Temporary Workforce Housing						
Total Maximum Daily Summer Emissions	51.30	22.31	332.84	0.73	11,321.15	1,137.19
Total Maximum Daily Winter Emissions	39.95	23.81	146.82	0.64	11,321.10	1,137.15
Workforce Training						
Total Maximum Daily Summer Emissions	6.39	4.33	54.20	0.16	2,538.36	254.98
Total Maximum Daily Winter Emissions	5.29	4.79	31.97	0.14	2,538.35	254.97

Table 2-23. Estimated Maximum Daily Operational Criteria Air Pollutant Emissions by Land Use – Buildout (2055) – Unmitigated

Emissions Source	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
	Pounds per Day					
Public Transit Hub						
Total Maximum Daily Summer Emissions	13.89	12.77	158.74	0.49	7,818.24	785.29
Total Maximum Daily Winter Emissions	11.79	14.25	98.02	0.43	7,818.22	785.28
Research and Development						
Total Maximum Daily Summer Emissions	99.55	78.97	841.10	2.55	39,605.61	3,978.80
Total Maximum Daily Winter Emissions	82.78	86.81	498.06	2.25	39,605.49	3,978.71
Commercial						
Total Maximum Daily Summer Emissions	200.82	170.94	1,819.03	5.25	82,866.26	8,323.19
Total Maximum Daily Winter Emissions	171.86	188.87	1,227.72	4.63	82,866.21	8,323.15
Emergency Services						
Total Maximum Daily Summer Emissions	37.57	38.11	251.53	0.74	10,787.97	1,084.64
Total Maximum Daily Winter Emissions	31.75	40.18	150.45	0.66	10,787.93	1,084.61
Geothermal						
Total Maximum Daily Summer Emissions	577.72	615.87	1,639.63	3.21	41,265.73	4,122.07

Table 2-23. Estimated Maximum Daily Operational Criteria Air Pollutant Emissions by Land Use – Buildout (2055) – Unmitigated

Emissions Source	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
	Pounds per Day					
Total Maximum Daily Winter Emissions	482.94	619.82	809.19	2.88	41,264.76	4,121.34
Mineral Recovery, Processing, and Production						
Total Maximum Daily Summer Emissions	196.54	150.01	571.99	1.24	13,729.91	1,384.68
Total Maximum Daily Winter Emissions	159.71	151.14	264.46	1.13	13,729.53	1,384.40
Battery Manufacturing						
Total Maximum Daily Summer Emissions	554.23	245.21	2,191.23	9.76	71,099.69	7,153.65
Total Maximum Daily Winter Emissions	515.55	258.84	1,523.27	9.23	71,099.38	7,153.42
Green Hydrogen						
Total Maximum Daily Summer Emissions	87.77	48.43	328.90	1.08	5,859.08	597.17
Total Maximum Daily Winter Emissions	72.08	48.91	197.82	1.03	5,858.92	597.05
Anaerobic Digestor						
Total Maximum Daily Summer Emissions	74.61	41.18	279.07	24.24	4,600.09	469.86
Total Maximum Daily Winter Emissions	73.25	42.12	242.83	24.20	4,600.08	469.85

Table 2-23. Estimated Maximum Daily Operational Criteria Air Pollutant Emissions by Land Use – Buildout (2055) – Unmitigated

Emissions Source	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
	Pounds per Day					
Wastewater Treatment Plant						
Total Maximum Daily Summer Emissions	61.35	102.07	524.53	1.62	24,144.78	2,427.20
Total Maximum Daily Winter Emissions	54.18	107.01	333.99	1.44	24,144.74	2,427.17
Water Storage Facility						
Total Maximum Daily Summer Emissions	4.56	20.37	203.70	0.00	6.17	1.32
Total Maximum Daily Winter Emissions	4.56	20.37	203.67	0.00	6.17	1.32
Data Centers						
Total Maximum Daily Summer Emissions	1,710.70	7,069.83	4,430.81	8.42	13,554.62	1,570.15
Total Maximum Daily Winter Emissions	1,683.11	7,071.34	4,181.86	8.32	13,554.34	1,569.94
Business Industrial Parks						
Total Maximum Daily Summer Emissions	69.00	60.42	602.10	1.34	11,102.32	1,116.85
Total Maximum Daily Winter Emissions	57.14	62.25	462.36	1.25	11,102.20	1,116.76
Automobile Manufacturing						
Total Maximum Daily Summer Emissions	136.57	45.41	363.82	0.95	10,411.27	1,046.86

Table 2-23. Estimated Maximum Daily Operational Criteria Air Pollutant Emissions by Land Use – Buildout (2055) – Unmitigated

Emissions Source	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
	Pounds per Day					
Total Maximum Daily Winter Emissions	130.90	47.40	266.01	0.87	10,411.23	1,046.83
Manufacturing of Green Industrial						
Total Maximum Daily Summer Emissions	105.23	113.95	1,084.01	2.81	31,233.10	3,139.91
Total Maximum Daily Winter Emissions	88.23	119.94	790.57	2.58	31,232.96	3,139.81
Wholesale Distribution						
Total Maximum Daily Summer Emissions	185.24	396.48	2,968.07	6.69	16,960.99	1,718.14
Total Maximum Daily Winter Emissions	157.98	406.35	2,730.55	6.60	16,960.71	1,717.93
Logistics and Warehousing						
Total Maximum Daily Summer Emissions	123.87	265.63	1,984.92	4.47	11,307.39	1,145.49
Total Maximum Daily Winter Emissions	105.70	272.22	1,826.57	4.41	11,307.20	1,145.35
Outdoor Storage of Trucks, Shipping Containers, etc.						
Total Maximum Daily Summer Emissions	1.29	0.59	6.55	0.02	339.07	34.06
Total Maximum Daily Winter Emissions	1.24	0.67	4.20	0.02	339.07	34.06

Table 2-23. Estimated Maximum Daily Operational Criteria Air Pollutant Emissions by Land Use – Buildout (2055) – Unmitigated

Emissions Source	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
	Pounds per Day					
Intermodal Rail Hub						
Total Maximum Daily Summer Emissions	84.35	162.01	774.68	1.55	5,940.55	600.46
Total Maximum Daily Winter Emissions	70.25	162.59	652.80	1.50	5,940.41	600.35
Electric Vehicle Charging Stations						
Total Maximum Daily Summer Emissions	2.47	0.00	0.00	0.00	35,320.44	3,554.38
Total Maximum Daily Winter Emissions	2.47	0.00	0.00	0.00	35,320.44	3,554.38
Total Phase 3 Maximum Daily Summer Emissions	**4,504.01**	**9,683.54**	**21,659.28**	**77.62**	**455,979.39**	**46,065.46**
Total Phase 3 Maximum Daily Winter Emissions	**4,097.20**	**9,767.92**	**16,710.20**	**74.45**	**455,975.82**	**46,062.76**

Source: See Appendix B, Operational CalEEMod Files, for complete results.
Notes: VOC = volatile organic compound; NOx = oxides of nitrogen; CO = carbon monoxide; SOx = sulfur oxides; PM10 = coarse particulate matter; PM2.5 = fine particulate matter; — = value not available.
Emissions shown in Table 2-23 reflect the implementation of Program HP-7 and Policy HP-19 during operation.

Table 2-24 below compares the maximum daily area, energy, mobile, off-road, and stationary source emissions associated with project operation in each of the three operational scenarios. The maximum daily emissions are compared to the ICAPCD thresholds. Details of the emission calculations are provided in Appendix B.

Table 2-24. Estimated Maximum Daily Operational Criteria Air Pollutant Emissions by Phase

Emissions Source	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
	Pounds per Day					
Phase 1 (2035)						
Summer						
Mobile	353.18	555.53	4,677.02	13.98	212,801.44	21,380.73
Area	827.50	9.54	1,128.13	0.07	1.92	1.45
Energy	5.04	91.70	77.03	0.55	6.97	6.97
Off-Road	56.05	299.22	2,923.17	5.28	11.18	11.18
Stationary	1,185.68	4,178.64	2,593.62	19.17	442.59	151.53
Total Daily Summer Emissions	**2,427.46**	**5,134.64**	**11,398.96**	**39.04**	**213,264.10**	**21,551.87**
Winter						
Mobile	297.82	610.99	3,041.35	12.40	212,801.44	21,380.74
Area	646.89	0.00	0.00	0.00	0.00	0.00
Energy	5.04	91.70	77.03	0.55	6.97	6.97
Off-Road	56.05	299.22	2,923.17	5.28	11.18	11.18
Stationary	1,185.68	4,178.64	2,593.62	19.17	442.59	151.53
Total Daily Winter Emissions	**2,191.49**	**5,180.56**	**8,635.16**	**37.39**	**213,262.18**	**21,550.42**
Maximum Daily Emissions	**2,427.46**	**5,180.56**	**11,398.96**	**39.04**	**213,264.10**	**21,551.87**
ICAPCD Threshold	*137*	*137*	*550*	*150*	*150*	*550*
Threshold Exceeded?	**Yes**	**Yes**	**Yes**	**No**	**Yes**	**Yes**
Phase 2 (2045)						
Summer						
Mobile	497.06	799.05	6,864.53	22.89	373,425.83	37,519.37
Area	1,275.45	14.64	1,729.92	0.10	2.93	2.22
Energy	8.50	153.85	124.36	0.93	11.75	11.75
Off-Road	112.21	594.95	5,848.11	10.71	22.40	22.40
Stationary	1,669.71	5,946.71	3,625.51	21.96	570.91	211.67
Total Daily Summer Emissions	**3,562.94**	**7,509.20**	**18,192.43**	**56.58**	**374,033.83**	**37,767.40**
Winter						
Mobile	431.89	883.62	4,495.63	20.37	373,425.84	37,519.38
Area	999.37	0.00	0.00	0.00	0.00	0.00
Energy	8.50	153.85	124.36	0.93	11.75	11.75
Off-Road	112.21	594.95	5,848.11	10.71	22.40	22.40
Stationary	1,669.71	5,946.71	3,625.51	21.96	570.91	211.67
Total Daily Winter Emissions	**3,221.69**	**7,579.13**	**14,093.61**	**53.96**	**374,030.90**	**37,765.20**

Table 2-24. Estimated Maximum Daily Operational Criteria Air Pollutant Emissions by Phase

Emissions Source	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
	Pounds per Day					
Maximum Daily Emissions	**3,562.94**	**7,579.13**	**18,192.43**	**56.58**	**374,033.83**	**37,767.40**
ICAPCD Threshold	*137*	*137*	*550*	*150*	*150*	*550*
Threshold Exceeded?	**Yes**	**Yes**	**Yes**	**No**	**Yes**	**Yes**
Phase 3; Buildout (2055)						
Summer						
Mobile	554.95	960.50	8,124.08	27.83	455,262.37	45,742.00
Area	1,557.51	17.89	2,115.01	0.12	3.59	2.72
Energy	9.82	178.55	149.98	1.07	13.57	13.57
Off-Road	120.04	635.86	6,408.50	11.28	23.97	23.97
Stationary	2,261.69	7,890.74	4,861.72	37.31	675.90	283.22
Total Daily Summer Emissions	**4,504.00**	**9,683.54**	**21,659.28**	**77.62**	**455,979.39**	**46,065.46**
Winter						
Mobile	486.14	1,062.79	5,290.00	24.79	455,262.38	45,742.01
Area	1,219.52	0.00	0.00	0.00	0.00	0.00
Energy	9.82	178.55	149.98	1.07	13.57	13.57
Off-Road	120.04	635.86	6,408.50	11.28	23.97	23.97
Stationary	2,261.69	7,890.74	4,861.72	37.31	675.90	283.22
Total Daily Winter Emissions	**4,097.20**	**9,767.93**	**16,710.20**	**74.45**	**455,975.81**	**46,062.76**
Maximum Daily Emissions	**4,504.00**	**9,767.93**	**21,659.28**	**77.62**	**455,979.39**	**46,065.46**
ICAPCD Threshold	*137*	*137*	*550*	*150*	*150*	*550*
Threshold Exceeded?	**Yes**	**Yes**	**Yes**	**No**	**Yes**	**Yes**

Source: See Appendix B, Operational CalEEMod Files, for complete results.
Notes: VOC = volatile organic compound; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter; ICAPCD = Imperial County Air Pollution Control District.
<0.01 = reported value less than 0.01.
Emissions shown in Table 2-24 reflect the implementation of Program HP-7 and Policy HP-19 during operation.

As shown in Table 2-24, the project would exceed the numerical thresholds of significance established by ICAPCD for emissions of VOCs, NO_x, CO, and PM_{10} and $PM_{2.5}$; therefore, impacts are considered **significant without mitigation**.

Several mitigation measures have been identified that would reduce the project's operational criteria air pollutant emissions to the extent feasible (see MM-AQ-5 through MM-AQ-9). However, the emission reduction benefits of these mitigation measures are not readily quantifiable, and thus, mitigated emissions are not presented herein. Further, the magnitude of emission reductions attributable to these mitigation measures is not expected to reduce project emissions attributable to operational activities below ICAPCD's numerical thresholds of significance, as the emission exceedances primarily are attributable to mobile sources (i.e., vehicles) and stationary sources.

As discussed in Section 2.2.2.1, Criteria Air Pollutants, the SSAB has been designated as a national nonattainment area for O_3 and a California nonattainment area for O_3 and PM_{10}. The nonattainment status is the result of cumulative emissions from various sources of air pollutants and their precursors within the SSAB, including motor vehicles, off-road equipment, and commercial and industrial facilities. Construction and operation of the project would generate emissions of VOC and NO_x (which are precursors to O_3) and emissions of PM_{10} and $PM_{2.5}$. Because the project-generated operational emissions of VOCs, NO_x, CO, PM_{10}, and $PM_{2.5}$ would exceed the ICAPCD thresholds, the project would potentially result in a cumulatively considerable increase in emissions of nonattainment pollutants. Therefore, the project's cumulative air quality impact from operational emissions would be **significant and unavoidable**.

Overlap of Construction and Operation

During project development, project construction activities would occur concurrently with partial project operation. Therefore, for disclosure, a calculation of combined construction and operational emissions is provided. Estimated maximum daily criteria air pollutant emissions from the most intensive years of simultaneous construction and operational activities are presented in Table 2-25.

Table 2-25. Estimated Maximum Daily Concurrent Construction and Operational Criteria Air Pollutant Emissions

Year	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
	Pounds Per Day					
Summer						
2036						
Phase 2 Construction	105.92	133.12	746.98	1.18	61,855.87	6,187.64
Phase 1 Operation	2,427.46	5,134.64	11,398.96	39.04	213,264.10	21,551.87
Total	**2,533.38**	**5,267.76**	**12,145.94**	**40.22**	**275,119.97**	**27,739.51**
2046						
Phase 3 Construction	73.65	116.70	647.36	1.10	42,966.22	4,301.00
Phase 2 Operation	3,562.94	7,509.20	18,192.43	56.58	374,033.83	37,767.40
Total	**3,636.59**	**7,625.90**	**18,839.79**	**57.68**	**417,000.05**	**42,068.40**
Winter						
2036						
Phase 2 Construction	104.19	136.34	661.51	1.18	61,855.87	6,187.64
Phase 1 Operation	2,191.49	5,180.56	8,635.16	37.39	213,262.18	21,550.42
Total	**2,295.68**	**5,316.90**	**9,296.67**	**38.57**	**275,118.05**	**27,738.06**
2046						
Phase 3 Construction	73.04	118.92	603.46	1.10	42,966.22	4,301.00
Phase 2 Operation	3,221.69	7,579.13	14,093.61	53.96	374,030.90	37,765.20
Total	**3,294.73**	**7,698.05**	**14,697.07**	**55.06**	**416,997.12**	**42,066.20**
Maximum Daily Emissions	**3,636.59**	**7,698.05**	**18,839.79**	**57.68**	**417,000.05**	**42,068.40**
ICAPCD Threshold	*137*	*137*	*550*	*150*	*150*	*550*
Threshold Exceeded?	**Yes**	**Yes**	**Yes**	**No**	**Yes**	**Yes**

Source: Appendix B, Operational CalEEMod Files.

Notes: VOC = volatile organic compound; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter; ICAPCD = Imperial Valley Air Pollution Control District. Emissions shown in Table 2-26 reflect the implementation of Program HP-7 and Policy HP-18 during construction and Program HP-7 and Policy HP-19 during operation.

As shown in Table 2-25, and beginning in various calendar years, concurrent construction and operational activities would exceed the numerical thresholds of significance established by ICAPCD for operational emissions of VOCs, NO_x, CO, PM_{10}, and $PM_{2.5}$.

Concurrent construction and operational activities would result in emissions that would exceed the ICAPCD thresholds and result in a **significant impact**.

Several mitigation measures would reduce the project's construction and operational criteria air pollutant emissions, to the extent feasible (see MM-AQ-1 through MM-AQ-9). However, the emission reduction benefits of these mitigation measures are not readily quantifiable, and thus, mitigated emissions are not presented herein. Further, the magnitude of emission reductions attributable to these mitigation measures is not expected to reduce project emissions attributable to operational activities below ICAPCD's numerical thresholds of significance.

In summary, concurrent construction and operational activities would result in emissions that would exceed the ICAPCD

Health Effects of Criteria Pollutants

Currently, ICAPCD, CARB, and EPA have not approved a quantitative method to reliably, meaningfully, and consistently translate the mass emission estimates for the criteria air pollutants resulting from the project to specific health effects. In addition, there are numerous scientific and technological complexities associated with correlating criteria air pollutant emissions from an individual project to specific health effects or potential additional nonattainment days.

In connection with the judicial proceedings in *Sierra Club v. County of Fresno* (2018) 6 Cal. 5th 502 (Friant Ranch project), SCAQMD and the SJVAPCD filed amicus briefs attesting to the infeasibility of correlating an individual project's criteria air pollutant emissions to specific health impacts. The air quality modeling and health impact evaluation capabilities of both SJVAPCD and SCAQMD are among the most sophisticated of the air districts in California. The key relevant points from the SCAQMD and SJVAPCD briefs are summarized herein.

In requiring a health impact type of analysis for criteria air pollutants, it is important to understand how O_3 and PM are formed, dispersed, and regulated. The formation of O_3 and PM in the atmosphere as secondary pollutants[11] involves complex chemical and physical interactions of multiple pollutants from natural and anthropogenic sources. The O_3 reaction is self-perpetuating (or catalytic) in the presence of sunlight because NO_2 is photochemically reformed from nitric oxide. In this way, O_3 is controlled by both NO_x and VOC emissions (NRC 2005). The complexity of these interacting cycles of pollutants means that incremental decreases in one emission may not result in proportional decreases in O_3 (NRC 2005). Although these reactions and interactions are well-understood, variability in emission source operations and meteorology creates uncertainty in the modeled O_3 concentrations to which downwind populations may be exposed (NRC 2005). Once formed, O_3 can be transported long distances by wind and due to atmospheric transport; contributions of precursors from the surrounding region can also be important (EPA 2008). Because of the complexity of O_3 formation, a specific tonnage amount of VOCs or NO_X emitted in a

[11] Air pollutants formed through chemical reactions in the atmosphere are referred to as secondary pollutants.

particular area does not equate to a particular concentration of O_3 in that area (SJVAPCD 2015). PM can be divided into two categories: directly emitted PM and secondary PM. Secondary PM, like O_3, is formed via complex chemical reactions in the atmosphere between precursor chemicals such as SO_x and NO_x (SJVAPCD 2015). Because of the complexity of secondary PM formation, including the potential to be transported long distances by wind, the tonnage of PM-forming precursor emissions in an area does not necessarily result in an equivalent concentration of secondary PM in that area (SJVAPCD 2015). This is especially true for individual projects, like the project, where project-generated criteria air pollutant emissions are not derived from a single "point source," but from construction equipment and mobile sources (passenger cars and trucks) driving to, from, and around the project sites.

Another important technical nuance is that health effects from air pollutants are related to the concentration of the air pollutant that an individual is exposed to, not necessarily the individual mass quantity of emissions associated with an individual project. For example, health effects from O_3 are correlated with increases in the ambient level of O_3 in the air a person breathes (SCAQMD 2015). However, it takes a large amount of additional precursor emissions to cause a modeled increase in ambient O_3 levels over an entire region (SCAQMD 2015). The lack of a link between the tonnage of precursor pollutants and the concentration of O_3 and $PM_{2.5}$ formed is important because it is not necessarily the tonnage of precursor pollutants that causes human health effects; rather, it is the concentration of resulting O_3 that causes these effects (SJVAPCD 2015). Indeed, the ambient air quality standards, which are statutorily required to be set by EPA at levels that are requisite to protect the public health, are established as concentrations of O_3 and $PM_{2.5}$ and not as tonnages of their precursor pollutants (SJVAPCD 2015). Because the ambient air quality standards are focused on achieving a particular concentration region-wide, the tools and plans for attaining the ambient air quality standards are regional in nature. For CEQA analyses, project-generated emissions are typically estimated in pounds per day or tons per year and compared to mass daily or annual emission thresholds. Although CEQA thresholds are established at levels that the air basin can accommodate without affecting the attainment date for the ambient air quality standards, even if a project exceeds established CEQA significance thresholds, this does not mean that one can easily determine the concentration of O_3 or PM that would be created at or near the project site on a particular day or month of the year, or what specific health impacts would occur (SJVAPCD 2015).

In regard to regional concentrations and air basin attainment, SJVAPCD emphasized that attempting to identify a change in background pollutant concentrations that can be attributed to a single project, even one as large as the entire Friant Ranch Specific Plan,[12] is a theoretical exercise (SJVAPCD 2015). The situation is further complicated by the fact that background concentrations of regional pollutants are not uniform, either temporally or geographically, throughout an air basin but are constantly fluctuating based upon meteorology and other environmental factors. SJVAPCD noted that the currently available modeling tools are equipped to model the impact of all emission sources in the San Joaquin Valley Air Basin on attainment (SJVAPCD 2015). The SJVAPCD brief then indicated that "[r]unning the photochemical grid model used for predicting O_3 attainment with the emissions solely from the Friant Ranch project (which equate to less than one-tenth of one percent of the total NO_x and VOC in the Valley) is not likely to yield valid information given the relative scale involved" (SJVAPCD 2015).

SCAQMD and SJVAPCD have indicated that it is not feasible to quantify project-level health impacts based on existing modeling (SCAQMD 2015; SJVAPCD 2015). Even if a metric could be calculated, it would not be reliable because the models are equipped to model the impact of all emission sources in an air basin on attainment and

[12] The Friant Ranch Specific Plan proposed 2,683 single-family age-restricted units, 83 multifamily age-restricted units, 180 non-age-restricted multifamily units, and 250,000 square feet of commercial village within a Village Core that also provides for up to 50 residential units on approximately 942 acres (County of Fresno 2010).

would likely not yield valid information or a measurable increase in O_3 concentrations sufficient to accurately quantify O_3-related health impacts for an individual project.

Nonetheless, following the Supreme Court's Friant Ranch decision, some environmental impact reports where estimated criteria air pollutant emissions exceeded applicable air district thresholds have included a quantitative analysis of potential project-generated health effects using a combination of a regional photochemical grid model[13] and the EPA Benefits Mapping and Analysis Program (BenMAP or BenMAP–Community Edition).[14] The publicly available health impact assessments (HIAs) typically present results in terms of an increase in health incidences and/or the increase in background health incidence for various health outcomes resulting from the project's estimated increase in concentrations of O_3 and $PM_{2.5}$.[15] To date, the six publicly available HIAs reviewed herein have concluded that the evaluated project's health effects associated with the estimated project-generated increase in concentrations of O_3 and $PM_{2.5}$ represent a small increase in incidences and a very small percent of the number of background incidences, indicating that these health impacts are negligible and potentially within the models' margin of error. It is also important to note that although the results of the six available HIAs conclude that the project emissions do not result in a substantial increase in health incidences, the estimated emissions and assumed toxicity are also conservatively inputted into the HIA and thus overestimate health incidences, particularly for $PM_{2.5}$.

As explained in the SJVAPCD brief and noted previously, running the photochemical grid model used for predicting O_3 attainment with the emissions solely from an individual project like the Friant Ranch project or the project is not likely to yield valid information given the relative scale involved. The six examples reviewed support the SJVAPCD brief's contention that consistent, reliable, and meaningful results may not be provided by methods applied at this time. Accordingly, additional work by the industry and more importantly, air district participation, is needed to develop a more meaningful analysis to correlate project-level mass criteria air pollutant emissions and health effects for decision makers and the public. Furthermore, at the time of writing, no HIA has concluded that health effects estimated using the photochemical grid model and BenMAP approach are substantial provided that the estimated project-generated incidences represent a very small percent of the number of background incidences, potentially within the models' margin of error.

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13 The first step in the publicly available health impact assessments (HIAs) includes running a regional photochemical grid model, such as the Community Multiscale Air Quality model or the Comprehensive Air Quality Model, with extensions to estimate the increase in concentrations of ozone (O_3) and particulate matter less than or equal to 2.5 microns in diameter ($PM_{2.5}$) as a result of project-generated emissions of criteria and precursor pollutants. Air districts, such as SCAQMD, use photochemical air quality models for regional air quality planning. These photochemical models are large-scale air quality models that simulate the changes of pollutant concentrations in the atmosphere using a set of mathematical equations characterizing the chemical and physical processes in the atmosphere (EPA 2025d).

14 After estimating the increase in concentrations of O_3 and $PM_{2.5}$, the second step in the six examples includes the use of Benefits Mapping and Analysis Program (BenMAP) or BenMAP-Community Edition (BenMAP-CE) to estimate the resulting associated health effects. BenMAP estimates the number of health incidences resulting from changes in air pollution concentrations (EPA 2023). The health impact function in BenMAP-CE incorporates four key sources of data: (1) modeled or monitored air quality changes, (2) population, (3) baseline incidence rates, and (4) an effect estimate. All of the five example HIAs focused on O_3 and $PM_{2.5}$.

15 The following California Environmental Quality Act (CEQA) documents included a quantitative HIA to address Friant Ranch: (1) World Logistics Center Revised Final Environmental Impact Report (EIR) (City of Moreno Valley 2019), (2) March Joint Powers Association K4 Warehouse and Cactus Channel Improvements EIR (March JPA 2019), (3) Mineta San Jose Airport Amendment to the Airport Master Plan EIR (City of San Jose 2019), (4) City of Inglewood Basketball and Entertainment Center Project EIR (City of Inglewood 2020), (5) San Diego State University Mission Valley Campus Master Plan EIR (SDSU 2019), and (6) California State University Dominguez Hills 2018 Campus Master Plan EIR (CSU Dominguez Hills 2019).

Construction of the LVSP would result in emissions that would exceed the ICAPCD and regional thresholds for criteria air pollutants, including VOCs, NO_x, CO, PM_{10}, and $PM_{2.5}$, even after implementation of LVSP measures, regulations, and mitigation.

As discussed in Section 2.1.2, Pollutants and Effects, health effects associated with O_3 include respiratory symptoms, worsening of lung disease leading to premature death, and damage to lung tissue. VOCs and NO_x are precursors to O_3, for which the SSAB is designated as nonattainment with respect to the NAAQS and CAAQS. The contribution of VOCs and NO_x to regional ambient O_3 concentrations is the result of complex photochemistry. The increases in O_3 concentrations in the SSAB due to O_3 precursor emissions tend to be found downwind of the source location because of the time required for the photochemical reactions to occur. Further, the potential for exacerbating excessive O_3 concentrations would also depend on the time of year that the VOC emissions would occur, because exceedances of the O_3 NAAQS and CAAQS tend to occur between April and October, when solar radiation is highest. As described above, due to the lack of quantitative methods to assess this complex photochemistry, the holistic effect of a single project's emissions of O_3 precursors is speculative. That being said, because the project would exceed the ICAPCD VOC and NO_x thresholds during project operation, the project could contribute to health effects associated with O_3.

Health effects associated with NO_x and NO_2 (which is a constituent of NO_x) include lung irritation and enhanced allergic responses (see Section 2.1.2). Although project-related NO_x emissions would exceed the ICAPCD operational mass daily thresholds, because the SSAB is a designated attainment area for NO_2 (and NO_2 is a constituent of NO_x) and the existing NO_2 concentrations in the area are well below the NAAQS and CAAQS standards,[16] it is not anticipated that the LVSP would cause an exceedance of the NAAQS and CAAQS for NO_2 or result in potential health effects associated with NO_2 and NO_x. However, because the LVSP would exceed the ICAPCD NO_x threshold during operation, the LVSP could contribute to health effects associated with NO_x and NO_2.

Health effects associated with CO include chest pain in patients with heart disease, headache, light-headedness, and reduced mental alertness (see Section 2.1.2). CO tends to be a localized impact associated with congested intersections. The potential for CO hotspots is discussed under Section 2.4.3 below and is determined to be less than significant. Thus, the LVSP's CO emissions would not contribute to significant health effects associated with CO.

Health effects associated with PM_{10} and $PM_{2.5}$ include premature death and hospitalization, primarily for worsening of respiratory disease (see Section 2.1.2). Operation of the LVSP would exceed the ICAPCD thresholds for PM_{10} and $PM_{2.5}$. As such, the LVSP would potentially contribute to exceedances of the NAAQS and CAAQS for PM and obstruct the SSAB from coming into attainment for these pollutants. Regarding playa dust, as discussed in Section 2.1.2.2, Noncriteria Air Pollutants, current research does not support the idea that playa dust (dust PM_{10}) is exceptionally high in toxic metals (IID 2024) and therefore would not result in additional health effects beyond those associated with other PM. Because the LVSP has the potential to contribute substantial PM during operation, the LVSP could result in associated health effects. To combat potential health concerns, development within the LVSP would minimize the generation of airborne playa dust in several ways. Construction would include dust control measures, as described in Policy HP-18, Dust Suppression, and ICAPCD Regulation VIII Rules 800–806. Additionally, the LVSP would require that all roads used by future development projects within the Plan Area would need to be paved, per Policy HP-19, Paved Roads. The paving of previously unpaved roads and the construction of new paved roads would reduce the amount of PM_{10} generated within the Plan Area. By implementing dust-suppressing strategies during

[16] See Table 2-2, which shows that ambient concentrations of nitrogen dioxide (NO_2) at the El Centro monitoring station did not exceed the National Ambient Air Quality Standards or California Ambient Air Quality Standards between 2021 and 2023.

construction and a portion of long-term operations and also paving roadways, the LVSP would effectively reduce the generation of PM_{10} and minimize its risk of exposure on the project.

Although the above scientific and technological constraints present considerable doubt that quantifying health effects for individual CEQA projects may not accurately and meaningfully inform the public of how project-generated bare numbers (i.e., estimated criteria air pollutant emissions) translate to create potential adverse health effects, due to the size and scale of the LVSP, additional analysis is presented below for emissions occurring within the County.

The EPA CO-Benefits Risk Assessment (COBRA) screening model was used to estimate the potential health effects of the project based on the emissions of air pollutants (EPA 2021). The analysis year of 2055 was selected because it is the project's buildout year. The State of California and the County were selected for the location. For the statewide run, California was selected as the geographical extent. The criteria air pollutant emissions estimated using the methodologies above (see the Operational Emission Source Assumptions subsection and Impact AQ-2) were assumed for each location. A discount rate of 2% was selected because it is the default. COBRA assumes changes in adult mortality and nonfatal heart attacks occur over a 20-year period.

For Imperial County,[17] health outcomes related to O_3 and $PM_{2.5}$ attributed to project-related increases in ambient air concentrations include asthma-related emergency room visits (0.003 incidences per year), lung cancer incidence (0.2 incidences per year), all cardiovascular-related hospital admissions (not including myocardial infarctions) (0.96 incidences per year), all respiratory-related hospital admissions (0.5 incidences per year), mortality (2.3–5.1 incidences per year), and nonfatal acute myocardial infarction (1.6 incidences per year for all age groups). For context, between 2020 and 2022, the California Department of Public Health reported that Imperial County had an annual average of 1,653 mortalities from all causes and an age-adjusted death rate of 790 mortalities per 100,000 population (CDPH 2024b).

There are numerous scientific and technological complexities associated with correlating criteria air pollutant emissions from an individual project to specific health effects or potential additional nonattainment days, and methods available to quantitatively evaluate health effects may not be appropriate to apply to emissions associated with the project, which cannot be estimated with accuracy. See Appendix C, Health Effects of Criteria Air Pollutants Memorandum, for a detailed discussion of the health effects of criteria air pollutant emissions.

Summary

Criteria air pollutant emissions from project construction, project operation, and periods of overlapping construction and operation would be significant and unavoidable after mitigation. Associated health impacts related to criteria pollutants would also be **significant and unavoidable**.

Level of Significance Before Mitigation

Project-generated criteria air pollutant emissions during construction and operation would be **significant**.

[17] The CO-Benefits Risk Assessment inputs for mitigated annual criteria air pollutant emissions within San Joaquin County include the following (totals from multiple tables provided herein): 288.17 per year volatile organic compounds, 370.29 tons per year oxides of nitrogen, 1.96 tons per year sulfur dioxide, and 243.31 tons per year $PM_{2.5}$.

Mitigation Measures

MM-AQ-1 Additional Construction Equipment Emission Reductions. Prior to the issuance of grading permits, an individual project applicant or its designee shall provide evidence to the County of Imperial (County) that the following strategies shall be implemented during the project's construction phase:

A. Use electric- or hybrid-powered equipment for generators and other small pieces of equipment over 25 horsepower (e.g., forklifts), as commercially available.
B. Use cleaner fuel equipment, such as replacing diesel fuel with compressed natural gas or renewable diesel, as commercially available.

Commercially available equipment is herein defined as equipment sourced within 50 vehicle miles of the project site and within 10% of the cost of the diesel-fueled-equivalent equipment. The individual project applicant must contact at least three contractors or vendors within the County and submit to the County justification if the specified equipment is not commercially available.

MM-AQ-2 Notification of Construction Activities. Prior to the commencement of any construction activities, the applicant or its designee shall provide evidence to the County of Imperial that the applicant has employed a construction relations officer who will address community concerns regarding on-site construction activity. The applicant shall provide public notification in the form of a visible sign containing the contact information of the construction relations officer, who shall document complaints and concerns regarding on-site construction activity. The sign shall be placed in easily accessible locations and noted on grading and improvement plans.

MM-AQ-3 Limit Truck and Equipment Idling During Construction. The project applicant shall reduce idling time of heavy-duty trucks, either by requiring them to be shut off when not in use or limiting the time of idling to no more than 3 minutes (thereby improving upon the 5-minute idling limit required by the State Airborne Toxics Control Measure to Limit Diesel-Fueled commercial Motor Vehicle Idling, 13 CCR 2485). The project applicant shall post clear signage reminding construction workers to limit idling of construction equipment.

MM-AQ-4 Use of Super-Compliant Low-VOC Paint During Construction. During construction, the project shall use super-compliant low-VOC (volatile organic compound) paint (less than 10 grams per liter VOC) for all interior and exterior paint applications for residential and nonresidential land uses.

MM-AQ-5 Low-VOC Cleaning Supplies and Paint Educational Program. Prior to the occupancy of any on-site development, the applicant or its designee shall provide evidence to the County of Imperial that the applicant/phase developer has developed a green cleaning product and paint education program, to be made available at rental and purchasing offices and/or on websites. The educational program shall include a flyer (hardcopy and/or digital) that includes, at a minimum, an explanation of what volatile organic compounds (VOCs) are, how VOCs affect us, where to find low-VOC alternatives for cleaning supplies and paint, and additional resources for learning more.

MM-AQ-6 Landscape Maintenance Equipment Emission Reduction. The project applicant shall implement the following landscape maintenance equipment emission reduction measures:

a. **Include Outdoor Electrical Outlets.** Prior to the issuance of building permits, the project applicant or its designee shall provide evidence to the County of Imperial that the design plans include electrical outlets on structure exteriors to facilitate the use of electrical lawn and garden equipment.

b. **Encourage Use of Existing Yard Equipment Exchange and Rebate Programs.** Educational materials shall be provided to future residents about the Imperial County Air Pollution Control District Electric Lawn Mower Rebate Program and the Commercial Lawn Equipment Exchange Program. When conventional gasoline-powered yard equipment (e.g., lawn mowers, leaf blowers and vacuums, shredders, trimmers, and chainsaws) is exchanged for electric and rechargeable battery-powered yard equipment, direct greenhouse gas (GHG) emissions from fossil fuel combustion are displaced by indirect GHG emissions associated with the generation of electricity used to power the equipment.

MM-AQ-7 Idling Time Restriction. The following measure shall be implemented during all ongoing business operations and shall be included as part of contractual lease agreement language to ensure that tenants and operators of future development projects are informed of the following operational responsibility: Upon commencement of operations, the tenant/operator of future development projects shall be required to restrict truck idling on site to a maximum of 3 minutes, subject to exceptions defined by the California Air Resources Board's commercial vehicle idling requirements. The building manager or their designee shall be responsible for enforcing this requirement.

MM-AQ-8 Anti-Idling Implementation Measures. The following measures shall be implemented to reduce air pollutant emissions from idling during operations:

A. **Signage.** Legible, durable, weatherproof signs that identify the project's 3-minute idling restriction shall be placed at truck access gates, loading docks, and truck parking areas. At a minimum, each sign shall include: (1) instructions for truck drivers to shut off engines when not in use; (2) instructions for drivers of diesel trucks to restrict idling to no more than 3 minutes once the vehicle is stopped, the transmission is set to "neutral" or "park," and the parking brake is engaged; (3) telephone numbers of the building facilities manager and California Air Resources Board (CARB) to report violations; and (4) that penalties apply for violations. Prior to the issuance of an occupancy permit, the County of Imperial shall conduct a site inspection to ensure that the signs are in place.

B. **Efficient Load Management. The** facility operator(s) shall be required to train managers and employees on efficient scheduling and load management to eliminate unnecessary queuing and idling of trucks.

C. **Anti-Idling Training. Anti-Idling Training.** Tenants and operators at each project site shall ensure that site enforcement staff in charge of keeping the daily log and monitoring for excess idling will be trained/certified in diesel health effects and technologies, for example, by requiring attendance at CARB-approved courses (such as the free 1-day Course No. 512).

MM-AQ-9 Operational Backup Generator Emission Reductions. Prior to the issuance of building permits, an individual project applicant or its designee shall provide evidence to the County of Imperial (County) that any backup generators greater than 500 horsepower shall meet the U.S. Environmental Protection Agency's Tier 4 Final emission standards, to the extent feasible. If Tier 4

Final equipment is not available for a specific application, the project applicant shall provide documentation to the County demonstrating the unavailability and shall use the next-cleanest available technology, such as Tier 4 Interim or Tier 3 engines equipped with verified diesel emission control strategies, such as diesel particulate filters.

MM-AQ-10 Valley Fever Exposure Minimization. Prior to any ground-disturbing activities within Imperial County, the County of Imperial (County) or its designees shall implement the following valley fever provisions:

A. Between June 1 and November 30, when valley fever rates of infection are the highest, if wind speeds exceed 15 mph or temperatures exceed 95°F for 3 consecutive days, additional dust suppression measures (such as additional water or the application of additional soil stabilizer) shall be implemented prior to and immediately following ground-disturbing activities. The additional dust suppression shall continue until winds are 10 mph or lower and outdoor air temperatures are below 90°F for at least 2 consecutive days. The additional dust suppression measures shall be incorporated into the dust control plan.

B. Prior to any project forest treatment activity, the County shall prepare and implement a worker training program that describes potential health hazards associated with valley fever, common symptoms, proper safety procedures to minimize health hazards, and notification procedures if suspected work-related symptoms are identified during operation. The worker training program shall identify safety measures to be implemented by the County or its contractor during operation. Safety measures shall include the following:

- Provide HEPA-filtered air-conditioned enclosed cabs on heavy equipment. Train workers on the proper use of cabs, such as turning on air conditioning prior to using the equipment.
- Provide communication methods, such as two-way radios, for use by workers in enclosed cabs.
- Provide personal protective equipment, such as half-mask and/or full-mask respirators equipped with particulate filtration, to workers active in dusty work areas.
- Provide separate, clean eating areas with handwashing facilities for workers.
- Clean equipment, vehicles, and other items before they are moved off site to other work locations.

MM-AQ-11 Odor Control and Abatement Program – Anaerobic Digester Facilities and Wastewater Treatment Plants. Prior to issuing any building permits for odor-emitting facilities, the County of Imperial (County) or its designees shall implement the following odor control measures:

A. Odor Treatment Systems:

- The County shall require the facility to install and maintain effective odor control technologies, such as biofilters, activated carbon filters, or scrubber systems, to capture and neutralize odorous gases at their source.
- The County shall ensure that the facility conducts regular monitoring and maintenance to verify the performance of these odor control systems.

B. Regular Monitoring and Reporting:
   - The County shall mandate that the facility conduct regular odor monitoring at key locations around the site and at sensitive-receptor points (e.g., residential areas.
   - The County shall require the facility to submit periodic reports to ensure compliance with odor control standards and to evaluate the effectiveness of implemented measures.

C. Buffer Zones and Site Design:
   - The County shall ensure that an adequate buffer zone is maintained around odor-emitting facilities, including anaerobic digesters and wastewater treatment areas, to minimize exposure to sensitive receptors.
   - The County shall review and approve the facility's site design, ensuring that prevailing wind patterns and the distance to sensitive areas are considered, in order to reduce odor impacts.

Level of Significance After Mitigation

Construction of Phase 1, Phase 2, and Phase 3 of the project would exceed the criteria pollutant thresholds for VOCs, NO_x, CO, PM_{10}, and $PM_{2.5}$ established by ICAPCD with implementation of LVSP measures and regulations, resulting in a **significant** impact prior to mitigation. MM-AQ-1 through MM-AQ-5 would be implemented to reduce the project's criteria air pollutant emissions during construction but were not quantified. Therefore, construction-related impacts associated with a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment would be **significant and unavoidable**.

During operation of two interim phases and buildout, the project would exceed the numerical thresholds of significance established by ICAPCD for emissions of VOCs, NO_x, CO, PM_{10}, and $PM_{2.5}$ with implementation of LVSP measures, resulting in a **significant** impact prior to mitigation. MM-AQ-5 through MM-AQ-9 and MM-TRA-1 through MM-TRA-4 would be implemented to reduce the project's criteria air pollutant emissions during operation but were not quantified. Therefore, the project would result in a cumulatively considerable increase in emissions of nonattainment pollutants, and the impact would be **significant and unavoidable**.

Concurrent construction and operational activities would also exceed the numerical thresholds of significance recommended by ICAPCD for operational emissions of VOCs, NO_x, CO, PM_{10}, and $PM_{2.5}$.

2.4.3 Would the project expose sensitive receptors to substantial pollutant concentrations?

Health Effects of Carbon Monoxide (Potential for Carbon Monoxide Hotspots)

Mobile source impacts occur on two scales. Regionally, LVSP-related travel would add to regional trip generation and increase the VMT within the local airshed and the SSAB. Locally, traffic generated by the LVSP would be added to the local roadway system near the project site. If such traffic occurs during periods of poor atmospheric ventilation, is composed of many vehicles cold-started and operating at pollution-inefficient speeds, and is operating on roadways already crowded with non-project traffic, there is a potential for the formation of microscale CO hotspots in the area immediately around points of congested traffic. Because of continued improvement in

vehicular emissions at a rate faster than the rate of vehicle growth and/or congestion, the potential for CO hotspots in the SSAB is steadily decreasing.

At the time that the SCAQMD Handbook (1993) was published, the SCAB was designated nonattainment under the CAAQS and NAAQS for CO. In 2007, the SCAB was designated attainment for CO under both the CAAQS and NAAQS as a result of the steady decline in CO concentrations in the SCAB due to the turnover of older vehicles, introduction of cleaner fuels, and implementation of control technology on industrial facilities. SCAQMD conducted CO modeling for the 2003 AQMP[18] (SCAQMD 2003) for the four worst-case intersections in the SCAB: (1) Wilshire Boulevard and Veteran Avenue, (2) Sunset Boulevard and Highland Avenue, (3) La Cienega Boulevard and Century Boulevard, and (4) Long Beach Boulevard and Imperial Highway. At the time the 2003 AQMP was prepared, the intersection of Wilshire Boulevard and Veteran Avenue was the most congested intersection in Los Angeles County, with an average daily traffic volume of about 100,000 vehicles per day (SCAQMD 2003). Using CO emission factors for 2002, the peak modeled CO 1-hour concentration was estimated to be 4.6 ppm at the intersection of Wilshire Boulevard and Veteran Avenue. When added to the maximum 1-hour CO concentration from 2022 through 2024 at the Calexico High School monitoring station (see Table 2-2, Local Ambient Air Quality Data), which was 5.0 ppm in 2022, the 1-hour CO concentration would be 9.6 ppm, whereas the CAAQS is 20 ppm.

The 2003 AQMP also projected 8-hour CO concentrations at these four intersections for 1997 and from 2002 through 2005. From years 2002 through 2005, the maximum 8-hour CO concentration was 3.8 ppm at the Sunset Boulevard and Highland Avenue intersection in 2002; the maximum 8-hour CO concentration was 3.4 ppm at the Wilshire Boulevard and Veteran Avenue in 2002. Adding the 3.8 ppm to the maximum 8-hour CO concentration from 2022 through 2024 at the Calexico High School monitoring station (see Table 2-2), which was 3.6 ppm in 2022, the 8-hour CO would be 7.4 ppm, whereas the CAAQS is 9.0 ppm. Accordingly, CO concentrations at congested intersections would not exceed the 1-hour or 8-hour CO CAAQS unless projected daily traffic would be over 100,000 vehicles per day (e.g., intersections exceeding 100,000 vehicles per day do not necessarily result in a CO hotspot but instead may require additional analysis per the methodology applied herein).

The traffic analysis prepared for the LVSP evaluated average daily trips at 38 intersections within the Plan Area. Under 2050 conditions with full buildout of Phase 3 of the LVSP, the maximum daily intersection volume was estimated to be 49,990 trips, which occurs at the SR-111/SR-98 intersection (RICK Engineering 2025). See Appendix D, Carbon Monoxide Hotspots Intersection Volume Calculations, for details.

Regarding potential CO hotspots during construction, the maximum daily trips during construction are estimated to be 11,670 daily trips (during Phase 1 construction), which would be substantially less than LVSP operational trip generation. Phase 1, Phase 2, and Phase 3 (Buildout) are estimated to generate a total of 47,055 trips per day, 80,243 trips per day, and 92,933 trips per day, respectively. In addition, the overlap of Phase 3 construction (3,902 daily trips) and Phase 2 (including Phase 1) operation would generate a total of 84,145 trips per day. Thus, the maximum daily intersection volume with the addition of these vehicles on the roadway network during construction would be less than during operation.

Because the project would not contribute vehicles to any study intersection that would experience more than 100,000 vehicles per day during construction or operation, a CO hotspot is not anticipated to occur, and associated

[18] SCAQMD's carbon monoxide hotspot modeling guidance has not changed since 2003.

impacts would be less than significant. As such, potential project-generated impacts associated with CO hotspots during construction and operation would be **less than significant** without mitigation.

Toxic Air Contaminants

As discussed in Section 2.3.2.3, Health Risk Assessment, an HRA was performed to estimate the Maximum Individual Cancer Risk and the chronic hazard index for proximate residential receptors because of project construction and operation. Results of the HRA under unmitigated conditions are presented in Table 2-26.

Table 2-26. Health Risk Assessment Results

Impact Parameter	UTME (m)	UTMN (m)	Units	Project Impact	CEQA Threshold	Level of Significance
Maximum Individual Cancer Risk – Residential Off Site	636713.34	3666773.01	per million	24.4	10	**Significant**
Chronic Hazard Index – Residential Off Site	636713.34	3666773.01	index value	0.2	1.0	**Less than Significant**
Acute Hazard Index – Residential Off Site	636713.34	3666773.01	index value	0.2	1.0	**Less than Significant**
Maximum Individual Cancer Risk – Residential On Site	637181.16	3668546.19	per million	37.3	10	**Significant**
Chronic Hazard Index – Residential On Site	637181.16	3668546.19	index value	0.6	1.0	**Less than Significant**
Acute Hazard Index – Residential On Site	637194.73	3666999.56	index value	0.4	1.0	**Less than Significant**
Maximum Individual Cancer Risk – Worker On Site	637181.16	3668546.19	per million	49.8	10	**Significant**
Chronic Hazard Index – Worker On Site	637181.16	3668546.19	index value	0.9	1.0	**Less than Significant**
Acute Hazard Index – Worker On Site	637194.73	3666999.56	index value	0.4	1.0	**Less than Significant**

Note: UTME = Universal Transverse Mercator East; m = meter; UTMN = Universal Transverse Mercator North; CEQA = California Environmental Quality Act.
See Appendix E, Health Risk Assessment.

As shown in Table 2-26, project activities would result in a Residential Maximum Individual Cancer Risk of 24.4 in 1 million for off-site receptors, 37.3 in 1 million for on-site receptors, and 49.8 in 1 million for worker receptors, which exceeds the significance threshold of 10 in 1 million. The project would result in a chronic hazard index of 0.2 for off-site receptors, 0.6 for on-site receptors, and 0.9 for worker receptors, which is below the 1.0 significance threshold. The project would result in an acute hazard index of 0.2 for off-site receptors, 0.4 for on-site receptors, and 0.4 for worker receptors, which is below the 1.0 significance threshold. The project's TAC health risk impacts related to residential off-site cancer risk, residential on-site cancer risk, and worker on-site cancer risk would be **significant prior to mitigation**.

MM-AQ-1 through MM-AQ-9 would be implemented to reduce the project's TAC emissions during construction and operation but were not able to be quantified. Therefore, impacts associated with exposing sensitive receptors to substantial TAC concentrations would be **significant and unavoidable** related to residential off-site cancer risk, residential on-site cancer risk, residential off-site acute hazard index, and worker on-site cancer risk.

Valley Fever

As discussed in Section 2.1.2.2, Noncriteria Air Pollutants, valley fever is not highly endemic to Imperial County, with an incident rate of 11.7 cases per 100,000 people in 2023 (CDPH 2024a).

Propagation of valley fever is dependent on climatic conditions, with the potential for growth and surface exposure highest following early seasonal rains and long dry spells. Valley fever spores can be released when filaments are disturbed by earth-moving activities, although receptors must be exposed to and inhale the spores to be at increased risk of developing valley fever. Moreover, exposure to valley fever does not guarantee that an individual will become ill—approximately 60% of people exposed to the fungal spores are asymptomatic and show no signs of an infection (USGS 2000).

Development within the LVSP would employ dust control measures in accordance with the rules under ICAPCD Regulation VIII, Fugitive Dust Control Measures, which limit the amount of fugitive dust generated during construction. Furthermore, the implementation of Policy HP-18, Dust Suppression, would go beyond the requirements of ICAPCD Regulation VIII and would be implemented to further reduce fugitive dust generated by the LVSP during construction. These requirements are consistent with California Department of Public Health recommendations for the implementation of dust control measures, including regular application of water during soil-disturbing activities, to reduce exposure to valley fever by minimizing the potential that the fungal spores become airborne (CDPH 2013). Further, regulations designed to minimize exposure to valley fever hazards are included in Title 8 of the California Code of Regulations and would be complied with during the project's construction phase (California Department of Industrial Relations 2017).

Despite the LVSP's compliance with applicable regulatory standards and implementation of additional dust control measures, including Policy HP-18, as shown in Table 2-20, the magnitude of fugitive dust emissions (PM_{10}) during construction is substantial, and the potential for valley fever impacts is therefore **significant prior to mitigation**. The project would implement MM-AQ-10, Valley Fever Exposure Minimization, during construction, which would require additional dust suppression when valley fever rates of infection are the highest, in addition to a worker training program. Impacts associated with valley fever exposure for sensitive receptors during construction would be **less than significant with mitigation**.

During operation, the LVSP would require that all roads used by future development projects within the Plan Area would need to be paved, per Policy HP-19, Paved Roads, which would limit the amount of fugitive dust generated from vehicle travel. Operational activities would not involve substantial earth-moving activities, and valley fever spores would therefore have little potential to be released. As such, impacts associated with valley fever exposure for sensitive receptors during operation would be **less than significant**.

Summary

The potential for CO hotspots during operation would be less than significant without mitigation. Localized criteria air pollutant emissions and potential cancer health risks during construction and operation would be **significant and unavoidable** after mitigation. The potential for valley fever exposure during construction would be **less than significant with mitigation** and **less than significant** during operation without mitigation.

Level of Significance Before Mitigation

The potential for CO hotspots during operation would be less than significant without mitigation. Localized criteria air pollutant emissions and potential cancer health risks during construction and operation would be **significant** before mitigation. The potential for valley fever exposure during construction would be **significant** before mitigation.

Mitigation Measures

MM-AQ-10 Valley Fever Exposure Minimization. Prior to any ground-disturbing activities within Imperial County, the County of Imperial (County) or its designees shall implement the following valley fever provisions:

A. Between June 1 and November 30, when valley fever rates of infection are the highest, if wind speeds exceed 15 mph or temperatures exceed 95°F for 3 consecutive days, additional dust suppression measures (such as additional water or the application of additional soil stabilizer) shall be implemented prior to and immediately following ground-disturbing activities. The additional dust suppression shall continue until winds are 10 mph or lower and outdoor air temperatures are below 90°F for at least 2 consecutive days. The additional dust suppression measures shall be incorporated into the dust control plan.

B. Prior to any project forest treatment activity, the County shall prepare and implement a worker training program that describes potential health hazards associated with valley fever, common symptoms, proper safety procedures to minimize health hazards, and notification procedures if suspected work-related symptoms are identified during operation. The worker training program shall identify safety measures to be implemented by the County or its contractor during operation. Safety measures shall include the following:

- Provide HEPA-filtered air-conditioned enclosed cabs on heavy equipment. Train workers on the proper use of cabs, such as turning on air conditioning prior to using the equipment.
- Provide communication methods, such as two-way radios, for use by workers in enclosed cabs.
- Provide personal protective equipment, such as half-mask and/or full-mask respirators equipped with particulate filtration, to workers active in dusty work areas.
- Provide separate, clean eating areas with handwashing facilities for workers.
- Clean equipment, vehicles, and other items before they are moved off site to other work locations.

Level of Significance After Mitigation

The potential for CO hotspots during operation would be **less than significant** without mitigation. Localized criteria air pollutant emissions and potential cancer health risks during construction and operation would be **significant and unavoidable** after mitigation. The potential for valley fever exposure during construction would be **less than significant with mitigation** and **less than significant** during operation without mitigation.

2.4.4 Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Construction and operation of the LVSP would result in various emissions; however, criteria air pollutants, fugitive dust, and TACs are addressed under Sections 2.4.2 and 2.4.3, above. As such, this impact analysis is focused on the potential for an odor impact to occur. The occurrence and severity of potential odor impacts depends on numerous factors. The nature, frequency, and intensity of the source; the wind speeds and direction; and the sensitivity of receiving location each contribute to the intensity of the impact. Although offensive odors seldom cause physical harm, they can be annoying, cause distress among the public, and generate citizen complaints.

Odors would also be generated from vehicles and/or equipment exhaust emissions during construction of the LVSP. Odors produced during construction would be attributable to concentrations of unburned hydrocarbons from the tailpipes of construction equipment, architectural coatings, and asphalt pavement application. Such odors would be temporary and intermittent, would not affect a substantial number of people, and are typically expected by most individuals at the construction site. Such odors would also disperse rapidly from the Plan Area and generally occur at magnitudes that would not affect substantial numbers of people. Therefore, impacts associated with odors during construction would be considered **less than significant.**

Land uses and industrial operations associated with odor complaints include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding (SCAQMD 1993). Most of the land uses proposed by the LVSP would not engage in any of these activities or other potential activities that would generate operational odors. The LVSP entails operation of Solar, Community Opportunity Areas, Playas Renewables, Green Industrial, Manufacturing, and Logistics land use designations.

However, wastewater treatment plant and anaerobic digester facilities are proposed as land uses to be developed under the LVSP. As described in the LVSP, although these facilities are required to have advanced odor management systems (e.g., biofilters or carbon scrubbers) to control and minimize off-site odor impacts, they still have the potential to create new sources of odors during operation and could potentially create an odor nuisance pursuant to ICAPCD Rule 407, Nuisances. Therefore, operation of the project would result in odor impacts that are **significant.**

The project would implement MM-AQ-11, Odor Control and Abatement Program – Anaerobic Digester Facilities and Wastewater Treatment Plants, which would require these facilities to install odor treatment systems, implement regular monitoring and reporting, and ensure there are adequate buffer zones around the facilities. As such, the project would result in odor impacts during operations that are **less than significant with mitigation**.

Level of Significance Before Mitigation

Impacts would be **significant**.

Mitigation Measures

MM-AQ-11 Odor Control and Abatement Program – Anaerobic Digester Facilities and Wastewater Treatment Plants. Prior to issuing any building permits for odor-emitting facilities, the County of Imperial (County) or its designees shall implement the following odor control measures:

A. Odor Treatment Systems:
   - The County shall require the facility to install and maintain effective odor control technologies, such as biofilters, activated carbon filters, or scrubber systems, to capture and neutralize odorous gases at their source.
   - The County shall ensure that the facility conducts regular monitoring and maintenance to verify the performance of these odor control systems.

B. Regular Monitoring and Reporting:
   - The County shall mandate that the facility conduct regular odor monitoring at key locations around the site and at sensitive-receptor points (e.g., residential areas).
   - The County shall require the facility to submit periodic reports to ensure compliance with odor control standards and to evaluate the effectiveness of implemented measures.

C. Buffer Zones and Site Design:
   - The County shall ensure that an adequate buffer zone is maintained around odor-emitting facilities, including anaerobic digesters and wastewater treatment areas, to minimize exposure to sensitive receptors.
   - The County shall review and approve the facility's site design, ensuring that prevailing wind patterns and the distance to sensitive areas are considered, in order to reduce odor impacts.

Level of Significance After Mitigation

Impacts would be **less than significant with mitigation**.

3 Greenhouse Gas Emissions

3.1 Environmental Setting

3.1.1 Climate Change Overview

Climate change refers to any significant change in measures of climate, such as temperature, precipitation, or wind patterns, lasting for an extended period of time (i.e., decades or longer). The Earth's temperature depends on the balance between energy entering and leaving the planet's system. Many factors, both natural and human, can cause changes in Earth's energy balance, including variations in the sun's energy reaching Earth, changes in the reflectivity of Earth's atmosphere and surface, and changes in the greenhouse effect, which affects the amount of heat retained by Earth's atmosphere (EPA 2025e).

The greenhouse effect is the trapping and buildup of heat in the atmosphere (troposphere) near the Earth's surface. The greenhouse effect traps heat in the troposphere through a threefold process, as follows: Short-wave radiation emitted by the sun is absorbed by the Earth, the Earth emits a portion of this energy in the form of long-wave radiation, and GHGs in the upper atmosphere absorb this long-wave radiation and emit it into space and toward the Earth. The greenhouse effect is a natural process that contributes to regulating the Earth's temperature and creates a pleasant, livable environment on the Earth. Human activities that emit additional GHGs to the atmosphere increase the amount of infrared radiation that gets absorbed before escaping into space, thus enhancing the greenhouse effect and causing the Earth's surface temperature to rise (EPA 2025e).

The scientific record of the Earth's climate shows that the climate system varies naturally over a wide range of time scales, and that, in general, climate changes prior to the Industrial Revolution in the 1700s can be explained by natural causes, such as changes in solar energy, volcanic eruptions, and natural changes in GHG concentrations. However, recent climate changes, in particular the warming observed over the past century, cannot be explained by natural causes alone. Rather, it is extremely likely that human activities have been the dominant cause of that warming since the mid-twentieth century and are the most significant driver of observed climate change (IPCC 2013; EPA 2025f). Human influence on the climate system is evident from the increasing GHG concentrations in the atmosphere, positive radiative forcing, observed warming, and improved understanding of the climate system (IPCC 2013). The atmospheric concentrations of GHGs have increased to levels unprecedented in the last 800,000 years, primarily from fossil fuel emissions and secondarily from emissions associated with land use changes (IPCC 2013). Continued emissions of GHGs will cause further warming and changes in all components of the climate system, which is discussed further in Section 3.2.5, Potential Effects of Climate Change.

3.1.2 Greenhouse Gases

A GHG is any gas that absorbs infrared radiation in the atmosphere; in other words, GHGs trap heat in the atmosphere. As defined in California Health and Safety Code Section 38505(g), for purposes of administering many of the state's primary GHG emissions reduction programs, GHGs include carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF_6), and nitrogen trifluoride (see also CEQA Guidelines Section 15364.5). Some GHGs, such as CO_2, CH_4, and N_2O, occur naturally and are emitted into the atmosphere through natural processes and human activities. Of these gases, CO_2 and CH_4 are emitted in the greatest quantities from human activities. Manufactured GHGs, which have a much greater heat-absorption potential than CO_2, include fluorinated gases, such as HFCs, PFCs, and SF_6, which are associated with

certain industrial products and processes. The following paragraphs provide a summary of the most common GHGs and their sources.[19]

Carbon Dioxide. CO_2 is a naturally occurring gas and a byproduct of human activities and is the principal anthropogenic GHG that affects the Earth's radiative balance. Natural sources of CO_2 include respiration of bacteria, plants, animals, and fungus; evaporation from oceans; volcanic out-gassing; and decomposition of dead organic matter. Human activities that generate CO_2 include combustion of fuels such as coal, oil, natural gas, and wood and changes in land use.

Methane. CH_4 is produced through both natural and human activities. CH_4 is a flammable gas and is the main component of natural gas. CH_4 is produced through anaerobic (without oxygen) decomposition of waste in landfills, flooded rice fields, animal digestion, decomposition of animal wastes, production and distribution of natural gas and petroleum, coal production, and incomplete fossil fuel combustion.

Nitrous Oxide. N_2O is produced through natural and human activities, mainly through agricultural activities and natural biological processes, although fuel burning and other processes also create N_2O. Sources of N_2O include soil cultivation practices (microbial processes in soil and water), especially the use of commercial and organic fertilizers, manure management, industrial processes (such as in nitric acid production, nylon production, and fossil-fuel-fired power plants), vehicle emissions, and using N_2O as a propellant (e.g., rockets, racecars, and aerosol sprays).

Fluorinated Gases. Fluorinated gases (also referred to as F-gases) are synthetic powerful GHGs emitted from many industrial processes. Fluorinated gases are commonly used as substitutes for stratospheric O_3-depleting substances (e.g., chlorofluorocarbons [CFCs], hydrochlorofluorocarbons [HCFCs], and halons). The most prevalent fluorinated gases include the following:

- **Hydrofluorocarbons:** HFCs are compounds containing only hydrogen, fluorine, and carbon atoms. HFCs are synthetic chemicals used as alternatives to O_3-depleting substances in serving many industrial, commercial, and personal needs. HFCs are emitted as by-products of industrial processes and are used in manufacturing.
- **Perfluorocarbons:** PFCs are a group of human-made chemicals composed of carbon and fluorine only. These chemicals were introduced as alternatives, with HFCs, to the O_3-depleting substances. The two main sources of PFCs are primary aluminum production and semiconductor manufacturing. Because PFCs have stable molecular structures and do not break down through the chemical processes in the lower atmosphere, these chemicals have long lifetimes, ranging between 10,000 and 50,000 years.
- **Sulfur Hexafluoride:** SF_6 is a colorless gas soluble in alcohol and ether and slightly soluble in water. SF_6 is used for insulation in electric power transmission and distribution equipment, semiconductor manufacturing, the magnesium industry, and as a tracer gas for leak detection.
- **Nitrogen Trifluoride:** Nitrogen trifluoride is used in the manufacture of a variety of electronics, including semiconductors and flat panel displays.

[19] The descriptions of greenhouse gases (GHGs) are summarized from the Intergovernmental Panel on Climate Change Fourth Assessment Report (IPCC 2007), the CARB GHG Inventory Glossary (CARB 2025l), and the EPA Glossary of Climate Change Terms (EPA 2017).

Chlorofluorocarbons. CFCs are synthetic chemicals that have been used as cleaning solvents, refrigerants, and aerosol propellants. CFCs are chemically unreactive in the lower atmosphere (troposphere), and the production of CFCs was prohibited in 1987 due to the chemical destruction of stratospheric O_3.

Hydrochlorofluorocarbons. HCFCs are a large group of compounds whose structure is very close to that of CFCs—containing hydrogen, fluorine, chlorine, and carbon atoms—but including one or more hydrogen atoms. Like HFCs, HCFCs are used in refrigerants and propellants. HCFCs were also used in place of CFCs for some applications; however, their use in general is being phased out.

Black Carbon. Black carbon is a component of $PM_{2.5}$, which has been identified as a leading environmental risk factor for premature death. It is produced from the incomplete combustion of fossil fuels and biomass burning, particularly from older diesel engines and forest fires. Black carbon warms the atmosphere by absorbing solar radiation, influences cloud formation, and darkens the surface of snow and ice, which accelerates heat absorption and melting. Black carbon is a short-lived species that varies spatially, which makes it difficult to quantify its GWP. DPM emissions are a major source of black carbon and are TACs that have been regulated and controlled in California for several decades to protect public health.

Water Vapor. The primary source of water vapor is evaporation from the ocean, with additional vapor generated by sublimation (change from solid to gas) from ice and snow, evaporation from other water bodies, and transpiration from plant leaves. Water vapor is the most important, abundant, and variable GHG in the atmosphere and maintains a climate necessary for life.

Ozone. Tropospheric O_3, which is created by photochemical reactions involving gases from both natural sources and human activities, acts as a GHG. Stratospheric O_3, which is created by the interaction between solar ultraviolet radiation and molecular oxygen (O_2), plays a decisive role in the stratospheric radiative balance. Depletion of stratospheric O_3 due to chemical reactions that may be enhanced by climate change results in an increased ground-level flux of ultraviolet-B radiation.

Aerosols. Aerosols are suspensions of PM in a gas emitted into the air through burning biomass (plant material) and fossil fuels. Aerosols can warm the atmosphere by absorbing and emitting heat and can cool the atmosphere by reflecting light.

3.1.3 Global Warming Potential

Gases in the atmosphere can contribute to climate change both directly and indirectly. Direct effects occur when the gas itself absorbs radiation. Indirect radiative forcing occurs when chemical transformations of the substance produce other GHGs, when a gas influences the atmospheric lifetimes of other gases, and/or when a gas affects atmospheric processes that alter the radiative balance of the Earth (e.g., affect cloud formation or albedo) (EPA 2025f). The Intergovernmental Panel on Climate Change developed the GWP concept to compare the ability of each GHG to trap heat in the atmosphere relative to another gas. The GWP of a GHG is defined as the ratio of the time-integrated radiative forcing from the instantaneous release of 1 kilogram of a trace substance relative to that of 1 kilogram of a reference gas (IPCC 2014). The reference gas used is CO_2; therefore, GWP-weighted emissions are measured in metric tons (MT) of CO_2 equivalent (CO_2e).

The current version of CalEEMod (version 2022.1.1.29) assumes that the GWP for CH_4 is 25 (so emissions of 1 MT of CH_4 are equivalent to emissions of 25 MT of CO_2), and the GWP for N_2O is 298, based on the Intergovernmental

Panel on Climate Change Fourth Assessment Report (IPCC 2007). The GWP values identified in CalEEMod were applied to the project.

3.2 Greenhouse Gas Inventories and Climate Change Conditions

3.2.1 Global Inventory

Anthropogenic GHG emissions worldwide in 2020 (the most recent year for which data is available) totaled approximately 49,800 million metric tons (MMT) of CO_2e, excluding land use change and forestry (PBL 2022). The top six GHG emitters are China, the United States, the Russian Federation, India, Japan, and the European Union, which accounted for approximately 60% of the total global emissions, or approximately 30,270 MMT CO_2e (PBL 2022). Table 3-1 presents the top GHG-emissions-producing countries and regions.

Table 3-1. Top Six Greenhouse Gas Producer Countries and Regions

Emitting Countries/Region	2020 Greenhouse Gas Emissions (MMT CO_2e)[a,b]
China	14,300
United States	5,640
European Union	3,440
India	3,520
Russian Federation	2,210
Japan	1,160
Total	**30,270**

Source: PBL 2022.
Notes: MMT CO_2e = million metric tons of carbon dioxide equivalent.
[a] Column may not add due to rounding.
[b] GHG emissions do not include land use change and forestry-related GHG emissions.

3.2.2 National Inventory

Per the EPA Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990–2022, total United States GHG emissions were approximately 6,343 MMT CO_2e in 2022 (EPA 2024). Total U.S. emissions have decreased by 3.1% from 1990 to 2022, down from a high of 15.2% above 1990 levels in 2007. Emissions increased from 2021 to 2022 by 0.2% (14.4 MMT CO_2e). Net emissions (i.e., including sinks) were 5,489.3 MMT CO_2e in 2022. Overall, net emissions increased 1.3% from 2021 to 2022 and decreased 16.7% from 2005 levels. From 2021 to 2022, the increase in total GHG emissions was driven largely by an increase in CO_2 emissions from fossil fuel combustion across most end-use sectors due, in part, to increased energy use from the continued rebound of economic activity after the height of the COVID-19 pandemic. The CO_2 emissions from fossil fuel combustion increased by 1.0% from 2021 to 2022 and were 1.1% below emissions in 1990. CO_2 emissions from natural gas use increased by 5.2% (84.80 MMT CO_2e) from 2021, and CO_2 emissions from coal consumption decreased by 6.1% (58.6 MMT CO_2e) from 2021 to 2022 (EPA 2024).

3.2.3 State Inventory

According to California's 2000–2023 GHG emissions inventory (2025 edition), California emitted approximately 360.4 MMT CO_2e in 2023 (CARB 2025m). The sources of GHG emissions in California include transportation, industry, electric power production from both in-state and out-of-state sources, residential and commercial activities, agriculture, high-GWP substances, and recycling and waste. Table 3-2 presents California GHG emission source categories and their relative contributions to the emissions inventory in 2023.

Table 3-2. Greenhouse Gas Emissions Sources in California

Source Category	Annual GHG Emissions (MMT CO_2e)	Percent of Total[a]
Transportation	133.7	37%
Industrial	66.9	19%
Electric Power	57.2	16%
Commercial and Residential	43.3	12%
Agriculture	29.2	8%
High-GWP substances	21.4	6%
Recycling and waste	8.6	2%
Total	360.4	100%

Source: CARB 2025m.
Notes: GHG = greenhouse gas; MMT CO_2e = million metric tons of carbon dioxide equivalent; GWP = global warming potential.
[a] Column may not add due to rounding.

In 2023, emissions from statewide emitting activities were 360.4 MMT CO_2e, 10.7MMT CO_2e (2.9%) lower than 2022 levels. Since the peak level in 2004 of 487 MMT, California's GHG emissions have generally followed a decreasing trend with an approximately 26% decrease from 2004. In 2014, statewide GHG emissions dropped below the 2020 GHG Limit of 431 MMT CO_2e and have remained below the Limit since that time (CARB 2024).

3.2.4 Local Inventory

A GHG emissions inventory and forecast were prepared for the region and each individual jurisdiction in Imperial Valley (Imperial County Transportation Commission 2021). The 2018 GHG inventory follows current protocol for community-wide inventories and includes all major sources of emissions for which the County has direct or indirect jurisdictional control. This inventory estimates GHG emissions from community-wide activities, organized by emissions sector (i.e., energy, transportation, water, waste, and agriculture). Table 3-3 shows the 2018 countywide emissions as provided in the Imperial County Regional Climate Action Plan.

Table 3-3. 2018 Imperial County Greenhouse Gas Emissions by Source

Source	Reported 2018 Annual Greenhouse Gas Emissions (MT CO_2e)	Percent of Total
Energy	98,708	3.5%
Transportation	339,132	11.9%
Water	9,694	0.3%
Waste	49,635	1.7%

Table 3-3. 2018 Imperial County Greenhouse Gas Emissions by Source

Source	Reported 2018 Annual Greenhouse Gas Emissions (MT CO_2e)	Percent of Total
Agriculture	2,342,975	82.5%
Total	**2,840,144**	**100%**

Source: Imperial County Transportation Commission 2021.
Notes: MT CO_2e = metric tons of carbon dioxide equivalent.
Totals may not sum due to rounding.

3.2.5 Potential Effects of Climate Change

The 2009 CEQA Statement of Reasons for Regulatory Action in Implementing SB 97, explained that "[S]ome comments submitted to OPR during its public workshops indicated that the [CEQA] Guidelines should be addressed to 'Climate Change' rather than just the effects of GHG emissions. The focus in the Guidelines on GHG emissions is appropriate" (CNRA 2009). Nevertheless, this section provides an overview of the consequences of GHG emissions.

In California, climate change impacts have the potential to affect sea-level rise, agriculture, snowpack and water supply, forestry, wildfire risk, public health, and electricity demand and supply. The primary effect of global climate change has been a rise in average global tropospheric temperature. Reflecting the long-term warming trend since preindustrial times, observed mean surface temperature for the decade 2006–2015 was approximately 0.87°C (33.6°F) higher than the average over the 1850–1900 period (IPCC 2023). Scientific modeling predicts that continued emissions of GHGs at or above current rates would induce more extreme climate changes during the twenty-first century than were observed during the twentieth century. Human activities are estimated to have caused approximately 1.0°C (1.8°F) of global warming above preindustrial levels, with a likely range of 0.8°C to 1.2°C (1.4°F to 2.2°F) (IPCC 2023). Global warming is likely to reach 1.5°C (2.7°F) between 2030 and 2052 if it continues to increase at the current rate (IPCC 2023).

Although climate change is driven by global atmospheric conditions, climate change impacts are felt locally. A scientific consensus confirms that climate change is already affecting California. The Office of Environmental Health Hazard Assessment identified various indicators of climate change in California, which are scientifically based measurements that track trends in various aspects of climate change. Many indicators reveal discernible evidence that climate change is occurring in California. Changes in the state's climate have been observed, including an increase in annual average air temperature, more frequent extreme heat events, more extreme drought, a decline in winter chill, an increase in cooling degree days and a decrease in heating degree days,[20] and an increase in variability of statewide precipitation (OEHHA 2022b).

Warming temperatures and changing precipitation patterns have altered California's physical systems—the ocean, lakes, rivers, and snowpack—upon which the state depends. Winter snowpack and spring snowmelt runoff from the Sierra Nevada and southern Cascade Mountains provide approximately one-third of the state's annual water supply. Impacts of climate on physical systems have been observed, such as high variability of snow-water content (i.e., amount of water stored in snowpack), decrease in snowmelt runoff, glacier change (loss in area), rise in sea levels,

[20] "Degree days" measure the difference between the average daily temperature and the reference temperature of 65°F. "Cooling" degree days refers to temperatures higher than 65°F (days when cooling devices may be necessary), and "heating" degree days refers to temperatures lower than 65°F (days when heating devices may be necessary) (OEHHA 2022b).

increase in average lake water temperature and coastal ocean temperature, and a decrease in dissolved oxygen in coastal waters (OEHHA 2022b).

Impacts of climate change on biological systems, including humans, wildlife, and vegetation, have also been observed, including climate change impacts on terrestrial, marine, and freshwater ecosystems. As with global observations, species responses include those consistent with warming: elevational or latitudinal shifts in range, changes in the timing of key plant and animal life-cycle events, and changes in the abundance of species and in community composition. Humans are better able to adapt to a changing climate than plants and animals in natural ecosystems. Nevertheless, climate change poses a threat to public health because warming temperatures and changes in precipitation can affect vector-borne pathogen transmission and disease patterns in California, as well as the variability of heat-related deaths and illnesses. In addition, since 1950, the area burned by wildfires each year has been increasing (CNRA 2018a).

The California Natural Resources Agency (CNRA) has released four California Climate Change Assessments (2006, 2009, 2012, and 2018), which have addressed acceleration of warming across the state; more intense and frequent heat waves; greater riverine flows; accelerating sea-level rise; more intense and frequent drought; more severe and frequent wildfires; more severe storms and extreme weather events; shrinking snowpack and less overall precipitation; and ocean acidification, hypoxia (i.e., low oxygen availability), and warming. The Fourth Assessment (CNRA 2018a) includes reports for nine regions of the state, including the Inland Deserts Region, where the project site is located. Key projected climate changes for the Inland Deserts Region include the following (CNRA 2018a):

- Temperatures are becoming more extreme, with daily average high temperatures expected to increase 8°F to 14°F. Higher temperatures will exacerbate water stress in the region.
- Rainfall in the Inland Deserts is extremely variable from year to year, and often as low as 5 inches per year. Increased variability in weather conditions and events will increase the region's susceptibility to flash flooding and wildfires.
- Population in the Inland Deserts is highly vulnerable to climate change, as is tourism, the region's major economic driver.
- Climate change will exacerbate stresses to the limited water supply feeding the Salton Sea and may accelerate the pace of decline through increasing evapotranspiration rates and possible changes in agricultural water management inputs and Colorado River allocations to the region.

Agriculture. Some of the specific challenges faced by the agricultural sector and farmers include more drastic and unpredictable precipitation and weather patterns; extreme weather events that range from severe flooding to extreme drought to destructive storm events; significant shifts in water availably and water quality; changes in pollinator lifecycles; temperature fluctuations, including extreme heat stress and decreased chill hours; increased risks from invasive species and weeds, agricultural pests, and plant diseases; and disruptions to the transportation and energy infrastructure supporting agricultural production (CNRA 2018a).

Biodiversity and Habitat. Specific climate change challenges to biodiversity and habitat include species migration in response to climatic changes; range shift and novel combinations of species; pathogens, parasites, and disease; invasive species; extinction risks; changes in the timing of seasonal life-cycle events; food web disruptions; threshold effects (i.e., a change in the ecosystem that results in a "tipping point" beyond which irreversible damage or loss has occurred) (CNRA 2018a).

Energy. Specific climate change challenges for the energy sector include temperature, fluctuating precipitation patterns, increasing extreme weather events, and sea-level rise (CNRA 2018a).

Forestry. The most significant climate change related risk to forests is accelerated risk of wildfire and more frequent and severe droughts. Droughts have resulted in more large-scale mortalities and, combined with increasing temperatures, have led to an overall increase in wildfire risks. Increased wildfire intensity subsequently increases public safety risks, property damage, fire suppression and emergency response costs, watershed and water quality impacts, and vegetation conversions (CNRA 2018a).

Ocean and Coastal Ecosystems and Resources. Sea-level rise, changing ocean conditions, and other climate change stressors are likely to exacerbate long-standing challenges related to ocean and coastal ecosystems, in addition to threatening people and infrastructure located along the California coastline and in coastal communities. Sea-level rise, in addition to more frequent and severe coastal storms and erosion, are threatening vital infrastructure such as roads, bridges, power plants, ports and airports, gasoline pipes, and emergency facilities, as well as negatively impacting coastal assets such as beaches and tidal wetlands (CNRA 2018a).

Public Health. Climate change can impact public health through various environmental changes, and is the largest threat to human health in the twenty-first century. Changes in precipitation patterns affect public health primarily through potential for altered water supplies, and extreme events such as heat, floods, droughts, and wildfires. Increased frequency, intensity, and duration of extreme heat and heat waves are likely to increase the risk of mortality due to heat-related illness and can exacerbate existing chronic health conditions. Other extreme weather events are likely to negatively impact air quality and increase or intensify respiratory illness, such as asthma and allergies (CNRA 2018a).

Transportation. Although the transportation industry is a source of GHG emissions, it is also vulnerable to climate change risks. Increasing temperatures and extended periods of extreme heat threaten the integrity of roadways and rail lines. High temperatures cause road surfaces to expand, which leads to increased pressure and pavement buckling. High temperatures can also cause rail breakages, which could lead to train derailment. Other forms of extreme weather events, such as extreme storm events, can negatively impact infrastructure, which can impair movement of peoples and goods, or potentially block evacuation routes and emergency access roads. Increased wildfires, flooding, erosion risks, landslides, mudslides, and rockslides can all profoundly impact the transportation system and pose a serious risk to public safety (CNRA 2018a).

Water. Climate change could seriously impact the timing, form, amount, runoff patterns, and frequency and severity of precipitation events. Higher temperatures reduce the amount of snowpack and lead to earlier snowmelt, which can impact water supply availability, natural ecosystems, and winter recreation. Water supply availability during dry summer months is heavily dependent on the snowpack accumulated during the wintertime. Increased risk of flooding has a variety of public health concerns, including water quality, public safety, property damage, displacement, and post-disaster mental health problems. Prolonged and intensified droughts can also negatively impact groundwater reserves and result in increased overdraft and subsidence. The higher risk of wildfires can lead to increased erosion, which can negatively impact watersheds and result in poor water quality (CNRA 2018a).

Local Climate Changes

In Imperial County, mean annual minimum temperatures are projected to rise significantly, with increases over 2°C expected in mean annual, monthly median, and minimum and maximum temperatures. Climate change projections

also indicate alterations in precipitation distribution and vegetation patterns, influenced by the ability of species to migrate and adapt to geographic changes (Imperial County 2016).

3.3 Regulatory Setting

3.3.1 Federal Regulations

Massachusetts v. EPA

In *Massachusetts v. EPA* (April 2007), the U.S. Supreme Court directed the EPA administrator to determine whether GHG emissions from new motor vehicles cause or contribute to air pollution that may reasonably be anticipated to endanger public health or welfare, or whether the science is too uncertain to make a reasoned decision. In December 2009, the administrator signed a final rule with the following two distinct findings regarding GHGs under federal Clean Air Act Section 202(a):

- The administrator found that elevated concentrations of GHGs—CO_2, CH_4, N_2O, HFCs, PFCs, and SF_6—in the atmosphere threaten the public health and welfare of current and future generations. This is the "endangerment finding."
- The administrator further found that the combined emissions of GHGs—CO_2, CH_4, N_2O, and HFCs—from new motor vehicles and new motor vehicle engines contribute to the GHG air pollution that endangers public health and welfare. This is the "cause or contribute finding."

These two findings were necessary to establish the foundation for regulation of GHGs from new motor vehicles as air pollutants under the Clean Air Act (42 USC 7401).

Notably, President Trump's EO 14154 issued on January 10, 2025, called for EPA to consider the legality and applicability of the 2009 Endangerment Finding for Greenhouse Gases, which may limit the ability and scope of the State of California to regulate based upon GHG emissions. On August 1, 2025, the EPA proposed rules to implement this EO (OFR 2025)

Energy Independence and Security Act

The Energy Independence and Security Act of 2007 (EISA; Public Law 110-140), among other key measures, included the following measures to aid in the reduction of national GHG emissions:

- Increase the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard (RFS) requiring fuel producers to use at least 36 billion gallons of biofuel in 2022.
- Set a target of 35 miles per gallon for the combined fleet of cars and light trucks by model year 2020 and direct the National Highway Traffic Safety Administration (NHTSA) to establish a fuel economy program for medium- and heavy-duty trucks and create a separate fuel economy standard for work trucks.
- Prescribe or revise standards affecting regional efficiency for heating and cooling products and procedures for new or amended standards, energy conservation, energy efficiency labeling for consumer electronic products, residential boiler efficiency, electric motor efficiency, and home appliances.

President Trump's EO 14154 may also impact the EISA. This order declared a national energy emergency and directed federal agencies to expedite the permitting and production of domestic energy resources. This emphasis on increasing fossil fuel production and reducing regulatory barriers may undermine the EISA's objectives of enhancing energy efficiency and promoting renewable energy sources.

Federal Vehicle Standards

In response to the *Massachusetts v. EPA* U.S. Supreme Court ruling discussed above, the Bush Administration issued EO 13432 in 2007 directing the EPA, the Department of Transportation, and the Department of Energy to establish regulations that reduce GHG emissions from motor vehicles, nonroad vehicles, and nonroad engines by 2008. In 2009, NHTSA issued a final rule regulating fuel efficiency and GHG emissions from cars and light-duty trucks for model year 2011; and, in 2010, the EPA and NHTSA issued a final rule regulating cars and light-duty trucks for model years 2012–2016 (75 FR 25324–25728). In March 2022, NHTSA established new fuel economy standards that would require an industry-wide fleet average of approximately 49 miles per gallon for passenger cars and light trucks in model year 2026 by increasing fuel efficiency by 8% annually for model years 2024 and 2025, and 10% annually for model year 2026.

On March 12, 2025, in response to President Trump's EO 14154, EPA stated that it would reconsider its 2024 rules that would cut passenger vehicle fleetwide tailpipe emissions by nearly 50% by 2032 compared with 2027 projected levels. The EPA said it is also reconsidering a 2022 regulation that aims to drastically cut smog- and soot-forming emissions from heavy-duty trucks, saying the rule makes trucks more expensive.

In January 2025, President Trump's Transportation Secretary moved to rescind fuel economy standards issued under President Biden that aimed to reduce fuel use for cars and trucks. He has also frozen funding to states for EV charging. The NHTSA in June 2024 said it would hike Corporate Average Fuel Economy requirements to about 50.4 miles per gallon (4.67 liters per 100 kilometers) by 2031 from 39.1 miles per gallon currently for light-duty vehicles. NHTSA said in June 2024 the rule for passenger cars and trucks would reduce gasoline consumption by 64 billion gallons through 2050 and cut emissions by 659 million metric tons. It said although some vehicles would be more expensive to buy, consumers would save on fuel costs and estimated net benefits of $35.2 billion.

Trump's Transportation Secretary also directed NHTSA to reconsider rules for heavy-duty pickup trucks and vans through 2035.

Executive Order 13990

On January 20, 2021, President Biden issued EO 13990, Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis. Section 7(e) of this EO directs the White House Council on Environmental Quality to rescind the 2019 Draft GHG Guidance and review, revise, and update its 2016 GHG Guidance. Among its key provisions, the EO directed federal agencies to review and potentially revise a range of policies, regulations, and actions that were inconsistent with the Biden administration's commitment to combating climate change and promoting environmental sustainability. The EO also sought to reestablish interagency working groups and committees that had been disbanded or sidelined during the previous administration, with a focus on restoring evidence-based decision-making processes.

The Interagency Working Group on the Social Cost of Greenhouse Gases is a collaborative effort involving multiple U.S. federal agencies, with the goal of providing scientifically sound estimates for the social cost of greenhouse gases. This metric assigns a monetary value to the long-term damages caused by CO_2, CH_4, and N_2O emissions, considering their impacts on climate change, public health, ecosystems, and the economy. The Interagency Working Group released the Technical Support Document: Social Cost of Carbon, Methane, and Nitrous Oxide Interim Estimates under EO 13990 in February 2021. The Technical Support Document contains methodologies, data, and analyses used by the Interagency Working Group to develop interim estimates for the social cost of carbon, methane, and nitrous oxide emissions under (IWG 2021).

Inflation Reduction Act of 2022

The Inflation Reduction Act (IRA) was signed into law by President Biden in August 2022. The bill provides for specific investment in energy and climate reform, and is projected to reduce GHG emissions within the United States by 40% compared to 2005 levels by 2030. The bill allocates funds to boost renewable energy infrastructure (e.g., solar panels and wind turbines), includes tax credits for the purchase of EVs, and includes measures that will make homes more energy efficient.

The IRA authorized the EPA to implement the Greenhouse Gas Reduction Fund program, which is a historic, $27 billion investment to mobilize financing and private capital to combat the climate crisis and ensure American economic competitiveness. The Greenhouse Gas Reduction Fund will be designed to achieve the following program objectives: reduce GHG emissions and other air pollutants; deliver the benefits of GHG- and air-pollution-reducing projects to American communities, particularly low-income and disadvantaged communities; and mobilize financing and private capital to stimulate additional deployment of GHG- and air-pollution-reducing projects (EPA 2025g).

The IRA confirms that reduction of GHGs is a core goal of the Clean Air Act and that the funding provided should allow the EPA to increase the scope of its Clean Air Act rulemakings. The act also confirms applicability of the IRA to GHGs in three specific areas: (1) California's ability to regulate GHG emissions from vehicles; (2) the EPA's authority to regulate CH_4 emissions from oil and gas facilities; and (3) the EPA's authority to regulate GHG emissions from power plants.

On July 4, 2025, President Trump enacted the One Big Beautiful Bill Act (OBBBA), which reduces the scope of the IRA and accelerates the phase-out of multiple IRA clean-energy incentives, such as residential energy and EV credits. The OBBBA also rescinds substantial federal funding for clean energy, environmental justice, and climate resilience programs, including the Greenhouse Gas Reduction Fund. Furthermore, on July 7, 2025, President Trump signed the EO 14315, which reinforces the changes made under the OBBBA, further hindering clean energy programs by eliminating taxpayer subsidies for wind, solar, and other clean energy sources.

3.3.2 State Regulations

The statewide GHG emissions regulatory framework is summarized in this subsection by category: state climate change targets, building energy, renewable energy and energy procurement, mobile sources, water, solid waste, and other state actions. The following text describes EOs, ABs, SBs, and other plans and policies that aim to directly or indirectly reduce GHG emissions and/or address climate change issues.

State Climate Change Targets

Assembly Bill 32

In furtherance of the goals established in EO S-3-05, the Legislature enacted AB 32, the California Global Warming Solutions Act of 2006 (California Health and Safety Code Sections 38500–38599 et seq.). AB 32 provided initial direction on creating a comprehensive multiyear program to limit California's GHG emissions at 1990 levels by 2020, and initiated the transformations required to achieve the state's long-range climate objectives. In 2016, the State of California achieved its 2020 GHG emission reduction targets as annual emissions fell below 431 MMT of CO_2e.

Senate Bill 32 and Assembly Bill 197

SB 32 and AB 197 (enacted in 2016) are companion bills. SB 32 codified the 2030 emissions reduction goal of EO B-30-15 by requiring CARB to ensure that statewide GHG emissions are reduced to 40% below 1990 levels by 2030. AB 197 established the Joint Legislative Committee on Climate Change Policies, consisting of at least three members of the Senate and three members of the Assembly, to provide ongoing oversight over implementation of the state's climate policies. AB 197 also added two members of the Legislature to the Board as nonvoting members; requires CARB to make available and update (at least annually via its website) emissions data for GHGs, criteria air pollutants, and TACs from reporting facilities; and requires CARB to identify specific information for GHG emissions reduction measures when updating the Scoping Plan.

Executive Order S-3-05

EO S-3-05 (June 2005) established California's GHG emissions reduction targets and laid out responsibilities among the state agencies for implementing the EO and for reporting on progress toward the targets. This EO established the following targets:

- By 2010, reduce GHG emissions to 2000 levels
- By 2020, reduce GHG emissions to 1990 levels
- By 2050, reduce GHG emissions to 80% below 1990 levels

EO S-3-05 also directed the California Environmental Protection Agency to report biannually on progress made toward meeting the GHG targets and the impacts to California due to global warming, including impacts to water supply, public health, agriculture, the coastline, and forestry.

Executive Order B-30-15

EO B-30-15 (April 2015) identified an interim GHG reduction target in support of targets previously identified under EO S-3-05 and AB 32. EO B-30-15 set an interim target goal of reducing GHG emissions to 40% below 1990 levels by 2030 to keep California on its trajectory toward meeting or exceeding the long-term goal of reducing GHG emissions to 80% below 1990 levels by 2050, as set forth in EO S-3-05. These orders are only applicable to "state agencies with jurisdiction over sources of greenhouse gas emissions" (Order 4-29-2015 Section 2). Imperial County does not fall within the definition of a State agency.

Executive Order B-55-18

EO B-55-18 (September 2018) establishes a statewide policy for the state to achieve carbon neutrality as soon as possible (but no later than 2045), and achieve and maintain net-negative emissions thereafter. The goal is an addition to the existing statewide targets of reducing the state's GHG emissions. CARB will work with relevant state agencies to ensure that future Scoping Plans identify and recommend measures to achieve the carbon neutrality goal.

California Air Resources Board's Climate Change Scoping Plan

One specific requirement of AB 32 is for CARB to prepare a "Scoping Plan" for achieving the maximum technologically feasible and cost-effective GHG emission reductions by 2020 (California Health and Safety Code Section 38561[a]), and to update the plan at least once every 5 years. In 2008, CARB approved the first Scoping Plan, the Climate Change Scoping Plan: A Framework for Change (2008 Scoping Plan). The 2008 Scoping Plan included a mix of recommended strategies that combined direct regulations, market-based approaches, voluntary measures, policies, and other emission reduction programs calculated to meet the 2020 statewide GHG emission limit and initiate the transformations needed to achieve the state's long-range climate objectives (CARB 2008).

In 2014, CARB approved the first update to the 2008 Scoping Plan. The First Update to the Climate Change Scoping Plan: Building on the Framework (First Update) defined the state's GHG emission reduction priorities for the next 5 years and laid the groundwork to start the transition to the post-2020 goals set forth in EO S-3-05 and EO B-16-2012 (CARB 2014). The First Update concluded that California was on track to meet the 2020 target, but recommended a 2030 midterm GHG reduction target be established to ensure a continuum of action to reduce emissions. The First Update recommended a mix of technologies in key economic sectors to reduce emissions through 2050, including energy demand reduction through efficiency and activity changes; large-scale electrification of on-road vehicles, buildings, and industrial machinery; decarbonizing electricity and fuel supplies; and the rapid market penetration of efficient and clean energy technologies.

In December 2017, CARB released the 2017 Climate Change Scoping Plan Update (Second Update) for public review and comment (CARB 2017a). The Second Update built on the successful framework established in the 2008 Scoping Plan and First Update while identifying new technologically feasible and cost-effective strategies that served as the framework to achieve the 2030 GHG target and define the state's climate change priorities to 2030 and beyond. The strategies' "known commitments" included implementing renewable energy and energy efficiency (including the mandates of SB 350), increased stringency of the Low Carbon Fuel Standard (LCFS), measures identified in the Mobile Source and Freight Strategies, measures identified in the proposed Short-Lived Climate Pollutant Plan, and increased stringency of SB 375 targets. To fill the gap in additional reductions needed to achieve the 2030 target, the Second Update recommended continuing the Cap-and-Trade Program and a measure to reduce GHGs from refineries by 20%. The Second Update was approved by CARB's Governing Board on December 14, 2017.

In December 2022, CARB approved the 2022 Scoping Plan, which outlines the state's plan to reduce anthropogenic emissions to 85% below 1990 levels by 2045, and achieve carbon neutrality by 2045 or earlier. The 2022 Scoping Plan also assesses the progress the state is making toward reducing GHG emissions by at least 40% below 1990 levels by 2030, as is required by SB 32 and laid out in the Second Update. The carbon neutrality goal requires CARB to expand proposed actions from only the reduction of anthropogenic sources of GHG emissions to also include those that capture and store carbon (e.g., through natural and working lands, or mechanical technologies). The carbon reduction programs build on and accelerate those currently in place, including moving to zero-emission

transportation; phasing out use of fossil gas use for heating homes and buildings; reducing use of chemicals and refrigerants with high GWP; providing communities with sustainable options for walking, biking, and public transit; displacement of fossil-fuel-fired electrical generation through use of renewable energy alternatives (e.g., solar arrays and wind turbines); and scaling up new options, such as green hydrogen.[21]

Lithium batteries play an important part of the 2022 Scoping Plan, which calls for increased battery EV adoption, 20% of aviation fuel demand to be met by battery-powered electrification/fuel cells with a transition to zero-emission technologies by 2045, and increased battery storage. The 2022 Scoping Plan identifies a demand for "11 million battery electric and hydrogen fuel cell vehicles in 2035 and over 23 million battery electric and hydrogen fuel cell vehicles in 2045" (CARB 2022). The 2022 Scoping Plan further explains that "Renewable energy is consistent during the middle of the day, but it cannot meet all of the evening demand…fossil gas generation is currently a resource that is typically ramped up to meet this evening demand as solar production begins to drop and electrical loads increase. To help address this challenge, resource installations that pair solar with batteries, as well as a greater amount of battery buildout…" (CARB 2022). The 2022 Scoping Plan estimates a demand of 37 gigawatts of battery storage by 2045 (CARB 2022).

The 2022 Scoping Plan also emphasizes that there is no realistic path to carbon neutrality without carbon removal and sequestration, and to achieve the state's carbon neutrality goal, carbon reduction programs must be supplemented by strategies to remove and sequester carbon. Strategies for carbon removal and sequestration include carbon capture and storage from anthropogenic point sources, where CO_2 is captured as it leaves a facility's smokestack and is injected into geologic formations or used in industrial materials (e.g., concrete), and CO_2 removal from ambient air through mechanical (e.g., direct air capture with sequestration) or nature-based (e.g., management of natural and working lands) applications.

The 2022 Scoping Plan recommends strategies for implementation at the statewide level to meet the goals of AB 32, SB 32, AB 1279, and the EOs; it also establishes an overall framework for the measures that will be adopted to reduce California's GHG emissions.

California Air Resources Board's Regulations for the Mandatory Reporting of Greenhouse Gas Emissions

CARB's Regulation for the Mandatory Reporting of Greenhouse Gas Emissions (17 CCR 95100–95157) incorporated by reference certain requirements that EPA promulgated in its Final Rule on Mandatory Reporting of Greenhouse Gases (40 CFR 98). Specifically, Section 95100(c) of the Mandatory Reporting Regulation incorporated those requirements that EPA promulgated in the Federal Register on October 30, 2009; July 12, 2010; September 22, 2010; October 28, 2010; November 30, 2010; December 17, 2010; and April 25, 2011. In general, entities subject to the Mandatory Reporting Regulation that emit more than 10,000 MT CO_2e per year are required to report annual GHGs through the California Electronic GHG Reporting Tool. Certain sectors, such as refineries and cement plants, are required to report regardless of emission levels. Entities that emit more than the 25,000 MT CO_2e per year threshold are required to have their GHG emissions report verified by a CARB-accredited third party.

[21] Green hydrogen refers to hydrogen generated by renewable energy or from low-carbon power; it has significantly lower associated carbon emissions than gray hydrogen, which is produced using natural gas and makes up the majority of hydrogen production. For the purposes of the Draft 2022 Scoping Plan, the term "green hydrogen" is not limited to only electrolytic hydrogen produced from renewables.

Senate Bill 605 and Senate Bill 1383

SB 605 (2014) requires CARB to complete a comprehensive strategy to reduce emissions of short-lived climate pollutants in the state (California Health and Safety Code Section 39730), and SB 1383 (2016) requires CARB to approve and implement that strategy by January 1, 2018 (PRC Sections 42652–43654). SB 1383 also establishes specific targets for the reduction of short-lived climate pollutants (40% below 2013 levels by 2030 for CH_4 and HFCs, and 50% below 2013 levels by 2030 for anthropogenic black carbon), and provides direction for reductions from dairy and livestock operations and landfills. Accordingly, CARB adopted its Short-Lived Climate Pollutant Reduction Strategy in March 2017. This strategy establishes a framework for the statewide reduction of emissions of black carbon, CH_4, and fluorinated gases (CARB 2017b).

Assembly Bill 1279

The Legislature enacted AB 1279, the California Climate Crisis Act, in September 2022. The bill declares the policy of the state to achieve net-zero GHG emissions as soon as possible, but no later than 2045, and achieve and maintain net-negative GHG emissions thereafter.

Although AB 1279 establishes an overall policy to achieve net-zero GHG emissions as soon as possible, but no later than 2045, recognizing the need to implement CO_2 removal and carbon capture, utilization, and storage technologies, the Legislature established a specific target of 85% below 1990 levels by 2045 for anthropogenic GHG emissions. Therefore, the net-zero target does not directly apply to development projects, but the 2045 target of 85% below 1990 levels represents the reductions required to accomplish the state's overall net-zero policy.

Building Energy

Title 24 of the California Code of Regulations requires California homes and businesses to meet strong energy efficiency measures, thereby lowering their energy use. Title 24 contains numerous subparts, including Part 1 (Administrative Code), Part 2 (Building Code), Part 3 (Electrical Code), Part 4 (Mechanical Code), Part 5 (Plumbing Code), Part 6 (Energy Code), Part 8 (Historical Building Code), Part 9 (Fire Code), Part 10 (Existing Building Code), Part 11 (Green Building Standards Code), Part 12 (Referenced Standards Code). The California Building Code is applicable to all development in California (Health and Safety Code Sections 17950 and 18938[b]).

California Code of Regulations, Title 24, Part 6 (Energy Code)

The California Building Standards Code was established in 1978 and serves to enhance and regulate California's building standards. Part 6 of Title 24 specifically established Building Energy Efficiency Standards that are designed to ensure that new and existing buildings in California achieve energy efficiency and preserve outdoor and indoor environmental quality. These energy efficiency standards are reviewed every few years by the Building Standards Commission and the CEC, and revised if necessary (PRC Section 25402[b][1]). The regulations receive input from members of industry and the public to "reduce the wasteful, uneconomic, inefficient, or unnecessary consumption of energy" (PRC Section 25402). Every 3 years, these regulations are carefully scrutinized and analyzed for technological and economic feasibility (PRC Section 25402[d]) and cost effectiveness (PRC Section 25402[b][2–3]). As a result, these standards save energy, increase electricity supply reliability, increase indoor comfort, avoid the need to construct new power plants, and help preserve the environment.

The 2022 standards improved upon the 2019 standards for new construction of, and additions and alterations to, residential and nonresidential buildings. The CEC updates the Title 24 Energy Code every 3 years. The CEC adopted the 2022 Title 24 Energy Code in August 2021, and the California Building Standards Commission approved incorporating the updated code into the California Building Standards Code in December 2021.

The CEC formally adopted the 2025 Title 24 Energy Code on September 11, 2024, which was then approved by the California Building Standards Commission on December 17, 2024, making its effective date January 1, 2026. Buildings whose permit applications are applied for on or after January 1, 2026, must comply with the 2025 Energy Code. The 2025 Energy Code updates for residential and nonresidential buildings introduce several key changes aimed at improving energy efficiency and supporting the state's climate goals. These include enhanced mechanical system standards, such as updated requirements for heating, ventilation, and air conditioning and heat pump water heaters, and stronger building envelope performance to reduce energy loss. Electrical systems now require more advanced lighting controls and expanded testing protocols. The code also adds readiness provisions for solar and battery storage installations and includes laboratories under its scope for energy-intensive processes. Compliance tools and manuals have been revised to reflect new modeling rules.

Starting in 2020, the California Energy Code was revised to require solar, and the 2022 Code required "All single-family residential buildings shall have a newly installed PV system or newly installed PV modules meeting the minimum qualification requirements specified in Joint Appendix JA11" (24 CCR Part 6, Section 150.1[c][14]). The California Energy Code was further updated in 2022 to require solar for multifamily buildings, and energy storage for structures greater than three habitable stories (24 CCR Part 6, Section 170.2[f], [g], [h]). Similarly, solar PV and energy storage are now required for grocery stores, offices, financial institutions, unleased tenant space, retail, schools, warehouses, auditoriums, convention centers, hotels/motels, libraries, medical office buildings/clinics, restaurants, theaters, and mixed-use buildings where one or more of these building types constitute at least 80% of the floor area (24 CCR Part 6, Section 140.10[a]). The 2025 standards expand upon requirements for PV and battery storage infrastructure compared to previous standards, including requiring readiness for connection with BESS system infrastructure in certain single-family homes.

The 2025 amendments include measures that will further reduce energy use in single-family, multifamily, and nonresidential buildings through the following strategies (CEC 2024a):

- For homes, use heat pumps for both space heating and water heating, expanding on the single heat pump baselines in the 2022 update.
- For nonresidential building types, expanding on the single zone heat pump baselines in the 2022 update.
- For low-rise multifamily buildings with individual water heaters in dwelling units, use heat pump water heater baselines, expanding on the space heating heat pump baselines in the 2022 update.
- Encouraging electric-ready buildings to set up owners to use cleaner electric water heating and cooking when they are ready to invest in those technologies.
- Updating photovoltaic and battery energy storage system standards for high-rise multifamily and nonresidential buildings to achieve cost-effective installations in consideration of revised net billing and virtual net billing rules.
- Updating space conditioning system control standards for nonresidential buildings.
- Updating ventilation requirements in multifamily buildings to improve indoor air quality.

California Code of Regulations, Title 24, Part 11

In addition to the CEC's efforts, in 2008, the California Building Standards Commission adopted the nation's first green building standards. The California Green Building Standards Code (Part 11 of Title 24) is commonly referred to as California's Green Building Standards (CALGreen). CALGreen establishes minimum mandatory standards and voluntary standards pertaining to the planning and design of sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and interior air quality. CALGreen took effect in January 2011 and instituted mandatory minimum environmental performance standards for all ground-up, new construction of commercial, low-rise residential and state-owned buildings and schools and hospitals. The CEC formally adopted the 2025 Title 24 Energy Code on September 11, 2024, which was then approved by the California Building Standards Commission on December 17, 2024, making its effective date January 1, 2026. Buildings whose permit applications are applied for on or after January 1, 2026, must comply with the 2025 Energy Code. The 2025 Energy Code updates for nonresidential buildings introduces several key changes aimed at improving energy efficiency and supporting the state's climate goals. These include enhanced mechanical system standards, such as updated requirements for heating, ventilation, and air conditioning and heat pump water heaters, and stronger building envelope performance to reduce energy loss. Electrical systems now require more advanced lighting controls and expanded testing protocols. The code also adds readiness provisions for solar and battery storage installations and includes laboratories under its scope for energy-intensive processes. Compliance tools and manuals have been revised to reflect new modeling rules, and the updates continue to align with CALGreen standards for sustainability, including water efficiency and indoor air quality.

California Code of Regulations, Title 20

Title 20 of the California Code of Regulations requires manufacturers of appliances to meet state and federal standards for energy and water efficiency (20 CCR 1401–1410 et seq.). The CEC certifies an appliance based on a manufacturer's demonstration that the appliance meets the standards. New appliances regulated under Title 20 include refrigerators, refrigerator-freezers, and freezers; room air conditioners and room air conditioning heat pumps; central air conditioners; spot air conditioners; vented gas space heaters; gas pool heaters; plumbing fittings and plumbing fixtures; fluorescent lamp ballasts; lamps; emergency lighting; traffic signal modules; dishwaters; clothes washers and dryers; cooking products; electric motors; low-voltage dry-type distribution transformers; power supplies; televisions and consumer audio and video equipment; and battery charger systems. Title 20 presents protocols for testing each type of appliance covered under the regulations, and appliances must meet the standards for energy performance, energy design, water performance, and water design. Title 20 contains three types of standards for appliances: federal and state standards for federally regulated appliances, state standards for federally regulated appliances, and state standards for non-federally regulated appliances.

Renewable Energy and Energy Procurement

SB 1078, EO-14-08, SBX1-2, SB 350, SB 100, SB 1020

SB 1078 (Sher) (September 2002) established the Renewables Portfolio Standard (RPS) program, which required an annual increase in renewable generation by the utilities equivalent to at least 1% of sales, with an aggregate goal of 20% by 2017. EO S-14-08 (November 2008) required that all retail suppliers of electricity in California serve 33% of their load with renewable energy by 2020. SB X1 2 expanded the RPS by establishing a renewable energy target of 20% of the total electricity sold to retail customers in California per year by December 31, 2013, and 33% by December 31, 2020, and in subsequent years. SB 350 (October 2015) further expanded the RPS

by establishing a goal of 50% of the total electricity sold to retail customers in California per year by December 31, 2030. SB 100 (2018) increased the standards set forth in SB 350, establishing that 44% of the total electricity sold to retail customers in California per year by December 31, 2024, 52% by December 31, 2027, and 60% by December 31, 2030, be secured from qualifying renewable energy sources. SB 100 states that it is the policy of the state that eligible renewable energy resources and zero-carbon resources supply 100% of the retail sales of electricity to California. SB 1020 (September 2022) revises the standards from SB 100, requiring the following percentage of retail sales of electricity to California end-use customers to come from eligible renewable energy resources and zero-carbon resources: 90% by December 31, 2035; 95% by December 31, 2040; and 100% by December 31, 2045.

Mobile Sources

State Vehicle Standards (Assembly Bill 1493 and Executive Order B-16-12)

AB 1493 (July 2002) was enacted in response to the transportation sector accounting for more than half of California's CO_2 emissions. AB 1493 required CARB to set GHG emission standards for passenger vehicles, light-duty trucks, and other vehicles determined by the State Board to be vehicles that are primarily used for noncommercial, personal transportation in the state. The bill required that CARB set GHG emission standards for motor vehicles manufactured in 2009 and all subsequent model years. CARB adopted the standards in September 2004. EO B-16-12 (March 2012) required that state entities under the governor's direction and control support and facilitate the rapid commercialization of zero-emission vehicles (ZEVs). It ordered CARB, the CEC, the California Public Utilities Commission (CPUC), and other relevant agencies to work with the Plug-in Electric Vehicle Collaborative and the California Fuel Cell Partnership to establish benchmarks to help achieve goals established for 2015, 2020, and 2025. On a statewide basis, EO B-16-12 established a target reduction of GHG emissions from the transportation sector equaling 80% less than 1990 levels by 2050. This directive did not apply to vehicles that have special performance requirements necessary for the protection of the public safety and welfare. EPA and the NHTSA approved the Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule Parts One and Two, which revoked California's authority to set its own GHG emissions standards and set ZEV mandates in California. Furthermore, individual cities and counties lack the ability to regulate fuel economy standards. 42 USC Section 7543(a) states: "No state or any political subdivision therefore shall adopt or attempt to enforce any standard relating to the control of emissions from new motor vehicles or new motor vehicle engines subject to this part."

In 2020, the EPA and the NHTSA approved the Trump administration's SAFE Vehicles Rule Part One and Two, which revoked California's authority to set its own GHG emissions standards and set ZEV mandates in California, and sought to reduce fuel economy standards. However, in March 2022, EPA reinstated California's authority under the Clean Air Act to implement its own GHG emission standards and ZEV sales mandate. EPA's action concluded its reconsideration of the 2019 SAFE-1 rule by finding that the actions taken under the previous administration as a part of SAFE-1 were decided in error and were entirely rescinded.

However, in 2025 the President of the United States signed an executive order, *Unleashing American Energy*, which directed the EPA to eliminate the social cost of carbon calculation from any federal permitting or regulatory decision and submit recommendations on the legality and continued applicability of the 2009 endangerment finding, among other directives (White House 2025). On July 29, 2025, the EPA released its proposal to rescind the 2009 endangerment finding and repeal all GHG emission standards for light-duty, medium-duty, and heavy-duty vehicles and engines pursuant to CAA section 202(a) (EPA 2025). The proposed rule would remove GHG-related provisions

from 40 CFR part 600 without affecting provisions related to CAFE standards and fuel economy labeling. (Vol. 90 Federal Register, No. 146, 36288.)

In May 2025, the U.S. Senate approved several bills under the Congressional Review Act which purported to rescind California's Clean Air Act waiver which allows California to regulate fuel economy. (H.J.Res. 87, H.J.Res. 88, H.J.Res. 89.) However, the U.S. Senate Parliamentarian and the Government Accountability Office (GAO) concluded that that the bills were illegal (GAO 2025). Consequently, California filed a lawsuit challenging the revocations. (See *State of California et al v. U.S.A et al.* (2025) N.D. Cal Case No. 25-CV-04966 challenging disapproval of California's Clean Air Act waivers which allowed California to set its own vehicular fuel economy standards) (California V.US EPA2025).

Furthermore, it is legally infeasible for individual cities and counties to regulate fuel economy standards. 42 U.S.C. § 7543(a) states: "No state or any political subdivision therefore shall adopt or attempt to enforce any standard relating to the control of emissions from new motor vehicles or new motor vehicle engines subject to this part."Heavy-Duty Diesel

CARB adopted the final Heavy-Duty Truck and Bus Regulation on December 31, 2014, to reduce DPM, a major source of black carbon, and NOx emissions from heavy-duty diesel vehicles (13 CCR 2025). The rule requires DPM filters be applied to newer heavier trucks and buses by January 1, 2012, with older vehicles required to comply by January 1, 2015. The rule required nearly all diesel trucks and buses to be compliant with the 2010 model year engine requirement by January 1, 2023. CARB also adopted an Airborne Toxic Control Measure on December 12, 2013, to limit idling of diesel-fueled commercial vehicles. This rule requires diesel-fueled vehicles with gross vehicle weights greater than 10,000 pounds to idle no more than 5 minutes at any location (13 CCR 2485).

Executive Order S-1-07

EO S-1-07 (January 2007, implementing regulation adopted in April 2009) sets a declining LCFS for GHG emissions measured in CO_2e grams per unit of fuel energy sold in California. The target of the LCFS is to reduce the carbon intensity of California passenger vehicle fuels by at least 10% by 2020 (17 CCR 95480 et seq.). The carbon intensity measures the amount of GHG emissions in the life cycle of a fuel—including extraction/feedstock production, processing, transportation, and final consumption—per unit of energy delivered. In September 2018, CARB approved amendments for the LCFS that require a 20% reduction in carbon intensity by 2030.

Senate Bill 375

SB 375 (California Government Code Section 65080 amendment, 2008) addresses GHG emissions associated with the transportation sector through regional transportation and sustainability plans. SB 375 requires CARB to adopt regional GHG reduction targets for the automobile and light-truck sector for 2020 and 2035, and to update those targets every 8 years. SB 375 requires the state's 18 regional metropolitan planning organizations to prepare an SCS as part of their RTP that will achieve the GHG reduction targets set by CARB. If a metropolitan planning organization is unable to devise an SCS to achieve the GHG reduction target, the metropolitan planning organization must prepare an Alternative Planning Strategy demonstrating how the GHG reduction target would be achieved through alternative development patterns, infrastructure, or additional transportation measures or policies.

A SCS does not (i) regulate the use of land; (ii) supersede the land use authority of cities and counties; or (iii) require that a city's or county's land use policies and regulations, including those in a General Plan, be consistent with it (California Government Code Section 65080[b][2][K]). Nonetheless, SB 375 makes regional and local planning

agencies responsible for developing those strategies as part of the federally required metropolitan transportation planning process and the state-mandated Housing Element process. In April 2024, SCAG approved its most recent RTP/SCS, Connect SoCal, which included updated targets of an 8% per capita reduction below 2005 levels by 2020 and a 19% per capita reduction by 2035 (SCAG 2024).

Advanced Clean Cars Program and Zero-Emission Vehicle Program

The Advanced Clean Cars (ACC) I program (January 2012) is an emissions control program for model years 2015 through 2025. The program combines the control of smog- and soot-causing pollutants and GHG emissions into a single coordinated package of regulations: the Low-Emission Vehicle regulation for criteria air pollutant and GHG emissions, and a technology-forcing regulation for ZEVs that contributes to both types of emission reductions (CARB 2025n). The package includes elements to reduce smog-forming pollution, reduce GHG emissions, promote clean cars, and provide the fuels for clean cars. To improve air quality, CARB has implemented new emission standards to reduce smog-forming emissions beginning with 2015 model year vehicles. It is estimated that by 2025, cars will emit 75% less smog-forming pollution than the average new car sold in 2015. The ZEV program will act as the focused technology of the ACC I program by requiring manufacturers to produce increasing numbers of ZEVs and plug-in hybrid EVs in the 2018 to 2025 model years.

The ACC II program, which was adopted in August 2022, established the next set of low-emission vehicle and ZEV requirements for model years after 2025 to contribute to meeting federal ambient air quality O_3 standards and California's carbon neutrality standards (CARB 2025n). The main objectives of ACC II are as follows:

- Maximize criteria and GHG emission reductions through increased stringency and real-world reductions.
- Accelerate the transition to ZEVs through both increased stringency of requirements and associated actions to support wide-scale adoption and use.

The ACC II rulemaking package also considers technological feasibility, environmental impacts, equity, economic impacts, and consumer impacts.

Executive Order N-79-20

EO N-79-20 (September 2020) requires CARB to develop regulations as follows: (1) passenger vehicle and truck regulations requiring increasing volumes of new ZEVs sold in the state toward the target of 100% of in-state sales by 2035; (2) medium- and heavy-duty vehicle regulations requiring increasing volumes of new zero-emission trucks and buses sold and operated in the state toward the target of 100% of the fleet transitioning to ZEVs by 2045 everywhere feasible and for all drayage trucks to be zero emission by 2035; and (3) strategies, in coordination with other state agencies, the EPA, and local air districts, to achieve 100% zero-emission from off-road vehicles and equipment operations in the state by 2035. EO N-79-20 called for the development of a Zero-Emission Vehicle Market Development Strategy, which was released February 2021, to be updated every 3 years, that ensures coordination and implementation of the EO and outlines actions to support new and used ZEV markets. In addition, the EO specifies identification of near-term actions and investment strategies to improve clean transportation, sustainable freight, and transit options, and calls for development of strategies, recommendations, and actions by July 15, 2021, to manage and expedite the responsible closure and remediation of former oil extraction sites as the state transitions to a carbon-neutral economy.

Advanced Clean Trucks Regulation

The Advanced Clean Trucks Regulation was approved by CARB in 2020. The purpose of the Advanced Clean Trucks Regulation is to accelerate the market for ZEVs in the medium- and heavy-duty truck sector, and to reduce air pollutant emissions generated from on-road mobile sources (CARB 2025o). The regulation has two components: (1) a manufacturer sales requirement and (2) a reporting requirement, as follows:

- **Zero-emission truck sales:** Manufacturers who certify Class 2b–8 chassis or complete vehicles with combustion engines will be required to sell zero-emission trucks as an increasing percentage of their annual California sales from 2024 to 2035. By 2035, zero-emission truck/chassis sales would need to be 55% of Class 2b–3 truck sales, 75% of Class 4–8 straight truck sales, and 40% of truck tractor sales.
- **Company and fleet reporting:** Large employers, including retailers, manufacturers, brokers, and others, will be required to report information about shipments and shuttle services. Fleet owners with 50 or more trucks will be required to report about their existing fleet operations. This information will help identify future strategies to ensure that fleets purchase available zero-emission trucks and place them in service where suitable to meet their needs.

Water

Executive Order B-29-15

In response to the ongoing drought in California, EO B-29-15 (April 2015) set a goal of achieving a statewide reduction in potable urban water usage of 25% relative to water use in 2013. The term of the EO extended through February 28, 2016, although many of the directives have become permanent water efficiency standards and requirements. The EO includes specific directives that set strict limits on water usage in the state. In response to EO B-29-15, the California Department of Water Resources has modified and adopted a revised version of the Model Water Efficient Landscape Ordinance that, among other changes, significantly increases the requirements for landscape water use efficiency and broadens its applicability to include new development projects with smaller landscape areas.

Executive Order N-10-21

In response to a state of emergency due to severe drought conditions, EO N-10-21 (July 2021) called on all Californians to voluntarily reduce their water use by 15% from their 2020 levels. Actions suggested in EO N-10-21 include reducing landscape irrigation, running dishwashers and washing machines only when full, finding and fixing leaks, installing water-efficient showerheads, taking shorter showers, using a shutoff nozzle on hoses, and taking cars to commercial car washes that use recycled water.

Solid Waste

Assembly Bill 939, Assembly Bill 341, Assembly Bill 1826, and Senate Bill 1383

In 1989, AB 939, known as the Integrated Waste Management Act (PRC Section 40000 et seq.), was passed because of the increase in waste stream and the decrease in landfill capacity. The statute established the California Integrated Waste Management Board (replaced in 2010 by the California Department of Resources Recycling and Recovery [CalRecycle]), which oversees a disposal reporting system. AB 939 required

jurisdictions to meet diversion goals of all solid waste through source reduction, recycling, and composting activities of 25% by 1995 and 50% by 2000.

AB 341 (2011) amended the California Integrated Waste Management Act of 1989 to include a provision declaring that it is the policy goal of the state that not less than 75% of solid waste generated be source-reduced, recycled, or composted by 2020, and annually thereafter. In addition, AB 341 required CalRecycle to develop strategies to achieve the state's policy goal. CalRecycle conducted multiple workshops and published documents that identified priority strategies that it believed would assist the state in reaching the 75% goal by 2020.

AB 1826 (Chapter 727, Statutes of 2014, effective 2016) requires businesses to recycle their organic waste (i.e., food waste, green waste, landscape and pruning waste, nonhazardous wood waste, and food-soiled paper waste that is mixed in with food waste) depending on the amount of waste they generate per week. This law also requires local jurisdictions across the state to implement an organic waste recycling program to divert organic waste generated by businesses, including multifamily residential dwellings that consist of five or more units. The minimum threshold of organic waste generation by businesses decreases over time, which means an increasingly greater proportion of the commercial sector will be required to comply.

SB 1383 (2016) requires a 50% reduction in organic waste disposal from 2014 levels by 2020, and a 75% reduction by 2025—essentially requiring the diversion of up to 27 million tons of organic waste—to reduce GHG emissions. SB 1383 also requires that not less than 20% of edible food that is currently disposed of be recovered for human consumption by 2025.

Other State Actions

Senate Bill 97

SB 97 (2007) directed the Governor's Office of Planning and Research and the California Natural Resources Agency to develop guidelines under CEQA for the mitigation of GHG emissions. The California Natural Resources Agency adopted the CEQA Guidelines amendments in December 2009, which became effective in March 2010.

Under the amended CEQA Guidelines, a lead agency has the discretion to determine whether to use a quantitative or qualitative analysis or apply performance standards to determine the significance of GHG emissions resulting from a particular project (14 CCR 15064.4[a]). The CEQA Guidelines require a lead agency to consider the extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions (14 CCR 15064.4[b]). The CEQA Guidelines also allow a lead agency to consider feasible means of mitigating the significant effects of GHG emissions, including reductions in emissions through the implementation of project features or off-site measures (14 CCR 15126.4[c]). The adopted amendments do not establish a GHG emission threshold, instead allowing a lead agency to develop, adopt, and apply its own thresholds of significance or those developed by other agencies or experts. The California Natural Resources Agency also acknowledged that a lead agency could consider compliance with regulations or requirements implementing AB 32 in determining the significance of a project's GHG emissions (CNRA 2009).

With respect to GHG emissions, CEQA Guidelines Section 15064.4(a), as subsequently amended in 2018, states that lead agencies "shall make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate" GHG emissions. The CEQA Guidelines now note that an agency "shall have discretion to determine, in the context of a particular project, whether to (1) Quantify greenhouse gas emissions

resulting from a project; and/or (2) Rely on a qualitative analysis or performance-based standards" (14 CCR 15064.4[a]). Section 15064.4(b) states that the lead agency should consider the following when assessing the significance of impacts from GHG emissions on the environment: (1) the extent to which a project may increase or reduce GHG emissions as compared to the existing environmental setting; (2) whether project emissions exceed a threshold of significance that the lead agency determines applies to the project; and (3) the extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions (14 CCR 15064.4[b]).

Executive Order S-13-08

EO S-13-08 (November 2008) is intended to hasten California's response to the impacts of global climate change, particularly sea-level rise. Therefore, the EO directs state agencies to take specified actions to assess and plan for such impacts. The final 2009 California Climate Adaptation Strategy report was issued in December 2009, and an update, Safeguarding California: Reducing Climate Risk, followed in July 2014. To assess the state's vulnerability, the report summarizes key climate change impacts to the state for the following areas: agriculture, biodiversity and habitat, emergency management, energy, forestry, ocean and coastal ecosystems and resources, public health, transportation, and water. Issuance of the Safeguarding California: Implementation Action Plans followed in March 2016. In January 2018, the California Natural Resources Agency released the Safeguarding California Plan: 2018 Update, which communicates current and needed actions that state government should take to build climate change resiliency (CNRA 2018b).

Blue Ribbon Commission and Governor Newsom

AB 1657 took effect on January 1, 2021, and required CEC to convene and establish a Blue Ribbon Commission on Lithium Extraction in California, commonly referred to as the Lithium Valley Commission, composed of 14 representatives and experts, to review, investigate, and analyze specific topics relating to lithium extraction in California and submit a report to the Legislature, documenting its findings and any recommendations developed after conducting the required review and analyses. In a crucial milestone toward making California a global leader in the production of lithium, the Lithium Valley Commission submitted its report of findings and recommendations to the state Legislature in December 2022 (Paz et al. 2022). The report concludes that the market demand for lithium-ion batteries will increase tenfold between 2020 and 2030.

The Report also acknowledges the need for a domestic source to serve this demand, highlighting lithium extraction rom geothermal brines as a potential supply stream. Furthermore, the Report explains the additional benefit of processing the lithium and manufacturing the lithium products in the Salton Sea region instead of outsourcing to overseas regions. According to the Report, a domestic manufacturing process would reduce environmental impacts of lithium-dependent products on a life-cycle basis. The Report concludes that "the state should continue to support the success of environmentally preferable, California-based lithium recovery facilities." Governor Newsom has similarly acknowledged that the state "aims to produce lithium in a more sustainable and environmentally safe way than nearly anywhere else in the world, by relying on modern extraction techniques rather than harmful hard rock mining or other traditional tools of extraction" (Office of Governor Gavin Newsom 2023).

3.3.3 Local Regulations

3.3.3.1 County of Imperial

Imperial County General Plan

Goals and policies pertaining to improving air quality are addressed in multiple chapters of the General Plan. The Conservation and Climate Change Element includes the following goals, objectives and policies related to reducing GHG emissions and the effects of climate change on the region:

Conservation and Climate Change Element

Objective 7.6: Explore and assess strategies to reduce greenhouse gas emissions in the County.

Policy 5b: Work cooperatively with ICTC and other appropriate agencies to reduce vehicle miles traveled countywide in order to improve air quality and reduce greenhouse gas emissions.

Policy 5c: Promote alternative transportation programs, policies, and development in order to reduce vehicle miles traveled and address air quality and greenhouse gas emissions.

Renewable Energy and Transmission Element

Goal 1: Support the safe and orderly development of renewable energy while providing for the protection of environmental resources.

Imperial County Regional Climate Action Plan

Adopted in June 2021, the ICRCAP serves both the ICTC and SCAG. The ICRCAP includes both emissions inventories for various jurisdictions in the Imperial Valley and identifies GHG reduction strategies and measures that would be implemented at the regional level to address climate change. The ICRCAP was prepared as an aspirational guiding document for the region to implementing GHG reduction measures that would reduce regional GHG emissions consistent with State targets and goals. The ICRCAP is not a qualified plan under CEQA Guidelines 15183.5.

Goal: Transportation

Strategy T-1: Reduce Vehicle Miles Travelled

- *Measure T-1.2: Plan and implement a system of bicycle lanes and multi-use trails that link the cities, unincorporated communities, schools, commercial/retail, employment centers, health care service facilities, public transportation, and other points of interest.*

Strategy T-2: Reduce Fuel Consumption

- *Measure T-2.2: Synchronize traffic signals to reduce idling.*
- *Measure T-2.4: Work with the air district to establish an incentive program to trade in fossil fuel-powered landscaping equipment with electric versions.*

Strategy T-3: Increase Use of Zero Emission/Alternative Fuel Vehicles

- *Measure T-3.2: Install public electric vehicle (EV) charging stations.*
- *Measure T-3.3: Require electric vehicle charging stations at new non-residential developments.*

Goal: Energy

Strategy E-1: Increase Energy Resiliency

- *Measure E-1.3: Reduce or eliminate natural gas and propane consumption in new and existing residential buildings.*

Strategy E-2: Increase Renewable and Zero-Carbon Energy Generation

- *Measure E-2.3: Reduce or eliminate natural gas and propane consumption in new and existing residential buildings.*
- *Measure E-2.6: Establish or join program to increase grid-supply renewable and zero-carbon electricity.*

Goal: Waste

Strategy WS-1: Reduce and Recycle Solid and Organic Wastes

- *Measure WS-1.2: Promote alternative uses of agricultural and organic waste by promoting the construction of composting and anaerobic digestion facilities.*
- *Measure WS-1.3: Create waste diversion ordinances for construction projects.*

Goal: Agriculture

Strategy AG-1: Improve Farming and Grazing Practices

- *Measure AG-1.1: Work with utilities and/or air districts to provide incentives such as CARB's FARMER program to convert stationary diesel- or gas-powered irrigation pumps to electric pumps that are connected to the grid or use off-grid alternative/renewable energy sources, such as solar.*
- *Measure AG-1.3: Provide incentives for replacing gas- or diesel-powered agricultural equipment with electric or alternatively fueled equivalents.*

Strategy AG-2: Promote Carbon Sequestration and Land Conservation

- *Measure AG-2.1: Consider various agricultural land and open space conservation strategies that allow developers to preserve lands and/or increase residential development density in smart growth infill areas by removing development potential of lands.*
- *Measure AG-2.2: Target stream restoration programs and riparian restoration strategies for carbon sequestration, natural heat relief, water quality improvements, and/or wildlife habitat mitigation.*

- *Measure AG-2.4: Develop and enforce landscape tree requirement for new developments.*

Draft Lithium Valley Specific Plan

The Draft LVSP was published in February 2025 and was prepared by the County to proactively establish a clear path forward toward an environmentally-conscious employment hub, called Lithium Valley, which will assist in meeting the nation's increasing demands for lithium and other minerals present in the Salton Sea KGRA. See Section 2.2.3.3 for a detailed discussion of the Draft LVSP and its policies, programs, conditions, and design standards relevant to GHG emissions.

3.3.3.2 Southern California Association of Governments

As noted above, California's 18 MPOs have been tasked with creating SCSs in an effort to reduce the region's VMT in order to help meet AB 32 targets through integrated transportation, land use, housing, and environmental planning. Pursuant to SB 375, CARB set per capita GHG emission reduction targets from passenger vehicles for each of the state's 18 MPOs. For SCAG, the state's initial mandated reductions were set at 8% by 2020 and 13% by 2035. In March 2018, CARB updated the SB 375 targets for SCAG to require 8% reduction by 2020 and a 19% reduction by 2035 in per capita passenger vehicle GHG emissions.

Pursuant to Government Code Section 65080(b)(2)(B), the SCS must "set forth forecasted development pattern for the region which when integrated with the transportation network, and other transportation measures and policies, will reduce the GHG emissions from automobiles and light trucks to achieve the GHG reduction targets." To that end, SCAG has developed Connect SoCal, the 2024–2050 RTP/SCS, which complies with CARB's updated emissions reduction targets and meets the requirements of SB 375 by achieving per capita GHG emission reductions relative to 2005 of 8% by 2020 and 19% by 2035 (SCAG 2024). The 2024–2050 RTP/SCS is a long-range visioning plan that balances future mobility and housing needs with economic, environmental, and public health goals, and charts a path toward a more mobile, sustainable, and prosperous region by making connections between transportation networks, between planning strategies, and between the people whose collaboration can improve the quality of life for Southern Californians. Connect SoCal embodies a collective vision for the region's future and is developed with input from local governments, county transportation commissions, tribal governments, nonprofit organizations, businesses, and local stakeholders within the counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura.

The 2024–2050 RTP/SCS states goals (1) Mobility: Build and maintain a robust transportation network; (2) Communities: Develop, connect and sustain communities that are livable and thriving; (3) Environment: Create a healthy region for the people of today and tomorrow; and (4) Economy: support a sustainable, efficient, and productive regional economic environment that provides opportunities for all residents. The RTP acknowledges that "New and emerging technologies have had a significant impact on the transportation sector, transforming various aspects of mobility, efficiency, safety and user experience. These technologies include advancements in vehicle technology, like electric vehicles" and "how zero-emission vehicles can strengthen resilience through vehicle-to-grid technologies or other opportunities where batteries can be used to enhance capacity of renewable energy sources." The "Plan also strives to achieve broader regional objectives, such as increased housing production, improved equity and resilience, the preservation of natural lands, improvement of public health, increased transportation safety, support for the region's vital goods movement industries and more efficient use of resources."

SCAG also adopted Resolution No. 23-653-1, which emphasizes the need for projects and strategies that ensure a safe, resilient, and efficient supply chain and goods movement system. The resolution also highlights that, due to the volume of trade in the SCAG region, which is home to the largest port complex in the country, the SCAG [must] develop strategies to accommodate growing freight movement" (SCAG 2023).

The RTP/SCSs do not require that local General Plans, Specific Plans, or zoning be consistent with it but provide incentives for consistency for governments and developers.

3.4 Significance Criteria and Methodology

3.4.1 Thresholds of Significance

California Environmental Quality Act Guidelines

The significance thresholds/criteria used to evaluate the proposed project's GHG emissions impacts are based on the recommendations provided in Appendix G of the CEQA Guidelines (14 CCR 15000 et seq.). For the purposes of this GHG emissions analysis, the proposed project would have a significant environmental impact if it would:

a) Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment
b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs

Global climate change is a cumulative impact; a project participates in this potential impact through its incremental contribution combined with the cumulative increase of all other sources of GHGs.

With respect to GHG emissions, CEQA Guidelines Section 15064.4(a) states that lead agencies "shall make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate" GHG emissions resulting from a project. The CEQA Guidelines note that an agency has the discretion to either quantify a project's GHG emissions or rely on a "qualitative analysis or performance-based standards" (14 CCR 15064.4[a]). A lead agency may use a "model or methodology" to estimate GHG emissions and has the discretion to select the model or methodology it considers "most appropriate to enable decision makers to intelligently take into account the project's incremental contribution to climate change" (14 CCR 15064.4[c]). The CEQA Guidelines provide that the lead agency should consider the following when determining the significance of impacts from GHG emissions on the environment (14 CCR 15064.4[b]):

1. The extent to which a project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting.
2. Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.
3. The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions.

In addition, the CEQA Guidelines specify that "[w]hen adopting or using thresholds of significance, a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies, or recommended by experts, provided the decision of the lead agency to adopt such thresholds is supported by

substantial evidence" (14 CCR 15064.7[c]). The CEQA Guidelines do not indicate an amount of GHG emissions that constitutes a significant impact on the environment.

The extent to which a project increases or decreases GHG emissions in the existing environmental setting should be estimated in accordance with CEQA Guidelines Section 15064.4, Determining the Significance of Impacts from Greenhouse Gas Emissions. The CEQA Guidelines indicate that when calculating GHG emissions resulting from a project, lead agencies should make a good-faith effort based on scientific and factual data (14 CCR 15064.4[a]) and that lead agencies have the discretion to select the model or methodology deemed most appropriate for enabling decision makers to intelligently assess the project's incremental contribution to climate change (14 CCR 15064.4[c]).

Governor's Office of Planning and Research Guidance

The Governor's Office of Planning and Research (now the Governor's Office of Land use and Climate Innovation) technical advisory CEQA and Climate Change: Addressing Climate Change through California Environmental Quality Act (CEQA) Review states that "public agencies are encouraged but not required to adopt thresholds of significance for environmental impacts. Even in the absence of clearly defined thresholds for GHG emissions, the law requires that such emissions from CEQA projects must be disclosed and mitigated to the extent feasible whenever the lead agency determines that the project contributes to a significant, cumulative climate change impact" (OPR 2008). Furthermore, the advisory document indicates that "in the absence of regulatory standards for GHG emissions or other scientific data to clearly define what constitutes a 'significant impact,' individual lead agencies may undertake a project-by-project analysis, consistent with available guidance and current CEQA practice" (OPR 2008).

Approach to Determining Significance

Consistent with CEQA Guidelines Section 15064.4(b)(1), Threshold GHG-a assesses whether the proposed project would generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment. Threshold GHG-a evaluation includes a comparison to the Plan Area (GHG-a1) and global baseline conditions (GHG-a2). Under the "Plan Area Emissions Baseline" comparison, the proposed project's emissions are quantified and compared to appropriate emission-based thresholds. The analysis under Threshold GHG-a2 qualitatively considers the effects of the renewable energy produced under the LVSP within the global context, including the benefits of developing a domestic lithium supply.

To address Threshold GHG-a1, the estimated project's GHG emissions are compared to an appropriate numeric threshold based on substantial evidence. The ICAPCD has not established quantitative significance thresholds for evaluating GHG emissions in CEQA analyses. The SCAQMD, based on substantial evidence as provided in the Draft Guidance Document – Interim CEQA Greenhouse Gas Significance Threshold (SCAQMD 2008) and subsequent Working Group meetings (latest in 2010), proposed a threshold of 3,000 MT CO_2e per year for GHG impacts. This threshold is based on the 90% capture rate methodology, which means that 90% of total emissions from all new or modified projects would be subject to some type of CEQA analysis, which was the approach taken by SCAQMD to establish the stationary/industrial source threshold and by CARB (for interim threshold for stationary source projects).[22] The 3,000 MT CO_2e per year threshold is not tied to the 2020 target year and is thus not outdated.

[22] The quantitative threshold based on market capture threshold was also one of the options suggested by the California Air Pollution Control Officers Association.

Further, this threshold has been used for hundreds, if not thousands, of GHG analyses performed for projects located within SCAQMD's jurisdiction.

Per SCAQMD guidance, construction emissions should be amortized over the operational life of the project, which is assumed to be 30 years (SCAQMD 2008). This impact analysis, therefore, adds amortized construction emissions to the estimated annual operational emissions and then compares operational emissions to the applied threshold of 3,000 MT CO_2e per year. As discussed previously, the GHG emissions associated with implementation of the LVSP were estimated using industry standard and accepted software tools, techniques, and emissions factors, as described in Section 3.4.2. Project-generated construction and operational GHG emissions are calculated and presented in Section 3.5.1.

As noted above, to address Threshold GHG-a2, the project is qualitatively evaluated in a broader context, considering a global baseline.

To address Threshold GHG-b, the potential for the proposed project to conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs, the LVSP's potential to conflict with state GHG reduction targets contained in the 2022 Scoping Plan, SCAG's 2024–2050 RTP/SCS, and relevant measures within the ICRCAP is qualitatively evaluated. A project is considered consistent with the provisions of these documents if it meets the general intent in reducing emissions and does not impede attainment of those goals. However, a given project need not be in perfect conformity with each and every planning policy or goal to be consistent. A project would be consistent with applicable plans, policies, and regulations if it would further their objectives and not obstruct their attainment.

3.4.2 Approach and Methodology

3.4.2.1 Construction Emissions

Construction Scenario Assumptions

CalEEMod Version 2022.1.1.29 was used to estimate potential project-generated GHG emissions during construction. Construction of the proposed project would result in GHG emissions primarily associated with the use of off-road construction equipment, on-road hauling and vendor (material delivery) trucks, and worker vehicles. All details for construction criteria air pollutants discussed in Section 2.3.2.1, Construction Emissions, are also applicable for the estimation of construction-related GHG emissions. As such, see Section 2.3.2.1 for a discussion of construction emissions calculation methodology and assumptions.

3.4.2.2 Operational Emissions

Operational Emission Source Assumptions

As with the air quality analysis, emissions from the operational phase of the proposed project were estimated primarily using CalEEMod Version 2022.1.29. Consistent with the phasing outlined in the Operational Land Use Assumptions subsection, three operational scenarios were evaluated, as follows:

- Phase 1 (2035): Includes operations of land uses constructed during Phase 1 (2025–2034)
- Phase 2 (2045): Includes operations of land uses constructed through Phase 2 (2035–2044)

- **Total Buildout (2055):** Includes operations of land uses constructed through Phase 3 (2045–2054)

Specific project acreages and operations are based on the land use development buildout designed for the project. The CalEEMod land use development summary for the proposed project under buildout in each of the operational scenarios is the same as presented in the air quality analysis tables in the Operational Land Use Assumptions subsection.

Mobile Sources

All details for criteria air pollutants discussed in the Operational Emission Source Assumptions subsections are also applicable for the estimation of operational mobile source GHG emissions.

Regulatory measures related to mobile sources include AB 1493 (Pavley) and related federal standards. AB 1493 required that CARB establish GHG emission standards for automobiles, light-duty trucks, and other vehicles that are primarily used for noncommercial personal transportation in the state. In addition, the NHTSA and EPA have established corporate fuel economy standards and GHG emission standards, respectively, for automobiles and light-, medium-, and heavy-duty vehicles. Implementation of these standards and fleet turnover (replacement of older vehicles with newer ones) will gradually reduce emissions from the project's motor vehicles. The effectiveness of fuel economy improvements was evaluated using the CalEEMod emission factors for motor vehicles to the extent it was captured in CalEEMod 2022.1.1.29, which is based on EMFAC2021. However, these calculations do not take into account the project's ability to displace existing or future trips.

Area Sources

CalEEMod was used to estimate GHG emissions from the project's area sources, including operation of gasoline-powered landscape maintenance equipment, which produces minimal GHG emissions. See the Operational Emission Source Assumptions subsection for a discussion of landscaping equipment emissions calculations. Consumer product use and architectural coatings result in VOC emissions, which are analyzed in the air quality analysis only because they have little to no GHG emissions.

Energy Sources

GHGs are emitted from buildings as a result of activities for which electricity and natural gas are typically used as energy sources. Combustion of any type of fuel emits CO_2 and other GHGs directly into the atmosphere; these emissions are considered direct emissions associated with a building (building energy use emissions do not include street lighting).[23] GHGs are also emitted during the generation of electricity from fossil fuels; these emissions are considered to be indirect emissions.

GHG emissions associated with the LVSP's natural gas and electricity usage were calculated in CalEEMod using a combination of land-use-specific electricity consumption inputs and default parameters. Default CalEEMod values were applied for most land uses, which includes natural gas and electricity use. See Section 4.3.2.2 for a complete description of energy sources modeling within CalEEMod.

[23] The CalEEMod emissions inventory model does not include indirect emissions related to street lighting. Indirect emissions related to street lighting are expected to be negligible and cannot be accurately quantified at this time because there is insufficient information as to the number and type of street lighting that would occur.

The CalEEMod default energy intensity factors (CO_2, CH_4, and N_2O mass emissions per kWh) for IID were adjusted based on the value for IID's 2023 Power Content Label as the baseline and the projected energy mix pursuant to the RPS requirements applicable for the operational year, as follows (CEC 2023):

- Phase 1 (2035): 90% renewables assumed per SB 1020
- Phase 2 (2045): 100% renewables assumed per SB 1020
- Phase 3 or Full Buildout (2055): 100% renewables assumed per SB 1020

Water and Wastewater

Supply, conveyance, treatment, and distribution of water for the LVSP require the use of electricity, which would result in associated indirect GHG emissions. Similarly, wastewater generated by the LVSP's land uses requires the use of electricity for conveyance and treatment, along with GHG emissions generated during wastewater treatment.

The indoor and outdoor water use and electricity consumption from water use and wastewater generation were estimated using plan-specific water use consumption estimates based on the building square footage of each land use. CalEEMod default values were used for the land uses where specific water and wastewater consumption estimates were not available.

Solid Waste

Land uses associated with the project would generate solid waste that is disposed and would therefore result in CO_2e emissions associated with landfill off-gassing (e.g., anaerobic breakdown of material).

No diversion of solid waste was assumed for the LVSP; however, this is a conservative assumption, as AB 939 had a statewide goal of 50% diversion by 2000, AB 341 had a statewide goal of 75% diversion by 2020, and both the state and the County continue to strive to reduce or divert landfill material. Furthermore, the newly formed County of Imperial Infrastructure Special District is expected to coordinate solid waste collection in accordance with the requirements of SB 1383, which mandates organic waste diversion and reductions in landfill disposal. These efforts will ensure compliance with state regulations while maintaining efficient waste management services within the district. CalEEMod default values were used for the land uses where specific solid waste estimates were not available.

Refrigerants

Refrigerants are substances used in equipment for air conditioning and refrigeration. Most of the refrigerants used today are HFCs or blends thereof, which can have high GWP values. All equipment that uses refrigerants has a charge size (i.e., quantity of refrigerant the equipment contains) and an operational refrigerant leak rate, and each refrigerant has a GWP specific to that refrigerant. CalEEMod quantifies refrigerant emissions from leaks during regular operation and routine servicing over the equipment lifetime and then derives average annual emissions from the lifetime estimate.

GHG emissions associated with the use of refrigerants during operations associated with the LVSP were calculated by CalEEMod using default parameters. Default CalEEMod values were applied for most land uses; however, alternative assumptions were applied to certain land uses to more accurately assess refrigerant emissions, as detailed below.

Land uses with alternative assumptions:

- **Solar, Substations, BESS, Floatovoltaics, Agrivoltaics:** Project operations of these land uses were modeled to include fugitive emissions of SF_6., which is widely used as an insulating gas in high-voltage circuit breakers, switchgear, and other electrical equipment included at each of these land uses. SF_6 has a GWP of 23,900, using CO_2 at a reference value of 1 (IPCC 2007). It was assumed that each of these land uses would maintain a total of 500 pounds of SF_6 gas. Although leakage is unlikely, for the purposes of the LVSP's emissions inventory, it was assumed that the breakers would have a maximum annual leak rate of 0.5% in accordance with Institute of Electrical and Electronics Engineers PC37.122, Standard for High-Voltage Gas-Insulated Substations Rated Above 52 kilovolts (IEEE 2011).

Off-Road Equipment

All details for criteria air pollutants discussed in the Operational Emission Source Assumptions subsection are applicable for the estimation of operational off-road equipment GHG emissions. Per HP-7, Equipment Exhaust Minimization, all off-road equipment used for operations shall meet EPA-rated Tier 4 Final engines. GHG emissions associated with usage of off-road equipment were calculated using CalEEMod.

Stationary Sources

All details for stationary sources criteria air pollutants discussed in the Operational Emission Source Assumptions subsection are applicable for the estimation of operational stationary sources GHG emissions. GHG emissions associated with stationary equipment were calculated using CalEEMod and spreadsheet models.

3.5 Impact Analysis

3.5.1 Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Regional Comparison

The purpose of the regional comparison is to quantify project-generated construction and operational GHG emissions and to compare emissions to the SCAQMD 3,000 MT CO_2e per year emission-based threshold.

For the purposes of this GHG emissions analysis, baseline emissions are assumed to be 0 MT CO_2e per year, which is conservative because existing operation of the Plan Area land uses would generate GHG emissions from mobile sources, energy demand, area sources, water use, solid waste generation, and agricultural operations.

Quantification of Greenhouse Gas Emissions

Construction Emissions

Construction of future development that would be facilitated by the LVSP would result in GHG emissions, which are primarily associated with use of off-road construction equipment, on-road haul trucks, on-road vendor trucks, and worker vehicles.

CalEEMod was used to calculate the annual GHG emissions based on the construction scenario discussed in the Construction Scenario Assumptions subsection.

Table 3-4 presents the estimated GHG emissions generated during each year of construction for the three construction phases. Details of the emission calculations are provided in Appendix A.

Table 3-4. Estimated Annual Construction Greenhouse Gas Emissions – Unmitigated

Year	CO_2	CH_4	N_2O	R	CO_2e
	Metric Tons per Year				
Phase 1					
2025	51,872.89	1.83	2.23	36.03	52,618.80
2026	54,490.34	1.96	2.23	32.79	55,236.95
2027	54,041.76	1.93	2.20	29.46	54,775.88
2028	53,676.99	1.93	2.13	26.37	54,386.83
2029	53,000.90	1.50	2.11	23.30	53,690.92
2030	52,028.36	1.48	2.04	20.49	52,692.95
2031	51,069.22	1.44	2.03	17.93	51,726.80
2032	50,750.05	1.44	1.96	15.69	51,386.24
2033	49,524.60	1.40	1.98	13.74	50,164.58
2034	48,451.77	1.27	2.02	11.98	49,096.93
				Phase 1 Subtotal	**525,776.88**
Phase 2					
2035	17,102.52	0.39	0.64	4.51	17,308.50
2036	20,177.12	0.52	0.67	3.93	20,392.37
2037	19,999.20	0.51	0.66	3.34	20,211.91
2038	19,905.69	0.51	0.63	2.83	20,108.44
2039	19,802.61	0.51	0.63	2.39	20,004.93
2040	19,300.47	0.49	0.63	2.01	19,501.20
2041	17,472.50	0.43	0.57	1.61	17,653.41
2042	17,403.65	0.42	0.57	1.36	17,584.02
2043	16,543.05	0.38	0.58	1.16	16,726.99
2044	15,735.16	0.35	0.60	0.99	15,923.15
				Phase 2 Subtotal	**185,414.92**
Phase 3					
2045	13,741.54	0.35	0.45	0.61	13,886.07

Table 3-4. Estimated Annual Construction Greenhouse Gas Emissions – Unmitigated

Year	CO_2	CH_4	N_2O	R	CO_2e
	Metric Tons per Year				
2046	16,870.68	0.48	0.47	0.54	17,024.55
2047	16,854.92	0.48	0.45	0.46	17,002.47
2048	15,652.95	0.44	0.40	0.36	15,783.76
2049	15,593.99	0.44	0.40	0.31	15,724.40
2050	15,217.30	0.42	0.42	0.55	15,352.67
2051	14,732.47	0.41	0.41	0.47	14,866.23
2052	14,717.04	0.41	0.39	0.39	14,844.57
2053	13,876.24	0.37	0.40	0.34	14,005.45
2054	12,984.26	0.33	0.41	0.30	13,113.99
				Phase 3 Subtotal	**151,604.16**
				Total Construction Emissions	**862,795.96**
				Amortized 30-Year Construction Emissions	*28,759.87*

Notes: CO_2 = carbon dioxide; CH_4 = methane; N_2O = nitrous oxide; R = refrigerant; CO_2e = carbon dioxide equivalent.
Totals may not sum due to rounding.
See Appendix A, Construction CalEEMod Files, for complete results.

As shown in Table 3-4, the estimated total GHG emissions during construction would be approximately 862,796 MT CO_2e over the 30-year construction period, without mitigation. Estimated project-generated construction emissions amortized over 30 years would be approximately 28,760 MT CO_2e per year. As with project-generated construction criteria air pollutant emissions, GHG emissions generated during construction of the project would last only for the duration of the construction period.

Operational Emissions

Operation of the project would generate GHG emissions through vehicle trips by residents, employees, customers, and visitors to and from the project site; landscape maintenance equipment operation; energy use (generation of electricity consumed by the project and minor natural gas use); solid waste disposal; water supply, treatment, and distribution; wastewater treatment; off-road maintenance equipment; and refrigerants. CalEEMod was used to calculate the annual GHG emissions based on the operational assumptions described in Section 3.4.2.2, Operation.

Operation of the LVSP would also implement LVSP Program HP-7, Equipment Exhaust Minimization, which requires that all off-road equipment used for operational and maintenance activity across the LVSP area be electric or net-zero emissions. Tables 3-5 through 3-10 reflect the reduction in GHG emissions from the implementation of PDF-AQ-2.

Table 3-5 shows the annual GHG emissions associated with interim LVSP operation for each land use after Phase 1 construction (year 2035). Details of the emission calculations are provided in Appendix B.

Table 3-5. Estimated Annual Interim Operational Greenhouse Gas Emissions by Land Use – Phase 1 (2035)

Land Use	CO_2	CH_4	N_2O	R	CO_2e
	Metric Tons per Year				
Solar	396.97	3.10	0.01	119.22	595.43
Substations	798.50	5.75	0.01	11.95	957.74
Battery Energy Storage System	1,828.30	10.68	0.03	98.67	2,202.32
Agrivoltaics	53.23	0.12	0.00	0.04	56.47
Floatovoltaics	168.54	0.13	0.00	59.68	232.36
Restoration/ Passive Uses	603.70	7.13	0.01	0.00	784.56
Parks	168.26	0.05	0.01	0.08	171.34
Housing	—	—	—	—	—
Temporary Workforce Housing	8,376.71	8.04	0.31	4.19	8,673.36
Workforce Training	902.57	0.43	0.03	0.43	923.47
Public Transit Hub	3,169.49	0.61	0.12	1.69	3,222.65
Research and Development	19,402.04	15.93	1.06	13.64	20,129.77
Commercial	23,569.27	3.57	1.05	13.19	23,985.56
Emergency Services	6,837.88	10.35	0.35	18.35	7,219.87
Geothermal	57,526.14	229.65	4.65	331.91	64,986.31
Mineral Recovery, Processing, and Production	23,591.27	93.30	1.83	129.08	26,598.37
Battery Manufacturing	50,858.02	55.94	2.02	106.41	52,964.59
Green Hydrogen	24,060.55	40.06	0.93	59.60	25,397.53
Anaerobic Digestor	2,223.58	12.40	0.35	3.10	2,641.32
Wastewater Treatment Plant	10,785.93	6.95	0.46	17.19	11,114.98
Water Storage Facility	260.74	0.03	0.00	0.00	262.89
Data Centers	448,150.73	102.09	7.78	98.13	453,119.75
Business Industrial Parks	10,460.39	8.41	0.26	27.72	10,777.36
Automobile Manufacturing	5,733.02	4.04	0.17	12.09	5,897.82
Manufacturing of Green Industrial Equipment	17,136.06	12.11	0.52	36.26	17,630.27
Wholesale Distribution	53,219.52	16.04	1.78	1,010.38	55,162.57
Logistics and Warehousing	35,670.96	10.70	1.19	673.59	36,966.99
Outdoor Storage of Trucks, Trailers, and Shipping Containers	267.42	0.02	0.01	0.06	270.13

Table 3-5. Estimated Annual Interim Operational Greenhouse Gas Emissions by Land Use – Phase 1 (2035)

Land Use	CO_2	CH_4	N_2O	R	CO_2e
	Metric Tons per Year				
Intermodal Rail Hub	12,267.86	7.59	0.20	1.44	12,518.43
Electric Vehicle Charging Stations	2,014.89	0.27	0.03	0.00	2,031.38
				Phase 1 Total	847,495.58

Notes: CO_2 = carbon dioxide; CH_4 = methane; N_2O = nitrous oxide; R= refrigerant; CO_2e = carbon dioxide equivalent; — = no date available.
Totals may not sum due to rounding.
Emissions shown in Table 3-5 reflect the implementation of Program HP-7 during operation.
See Appendix B, Operational CalEEMod Files, for complete results.

As shown in Table 3-5, operation of the project in Phase 1 in 2035 would result in approximately 846,496 MT CO_2e per year.

Table 3-6 shows the annual GHG emissions associated with interim LVSP operation for each land use after Phase 2 construction (year 2045). Details of the emission calculations are provided in Appendix B.

Table 3-6. Estimated Annual Interim Operational Greenhouse Gas Emissions by Land Use – Phase 2 (2045)

Land Use	CO_2	CH_4	N_2O	R	CO_2e
	Metric Tons per Year				
Solar	101.87	6.59	0.00	119.50	386.35
Substations	99.19	7.16	0.00	9.72	288.13
Battery Energy Storage System	184.41	14.26	0.00	103.56	644.69
Agrivoltaics	5.13	0.11	0.00	0.04	7.98
Floatovoltaics	14.65	0.11	0.00	5.97	23.47
Restoration/ Passive Uses	73.97	7.39	0.00	0.00	258.79
Parks	268.46	0.08	0.01	0.03	273.95
Housing	3,565.88	2.44	0.15	0.58	3,673.10
Temporary Workforce Housing	11,398.49	12.81	0.45	2.33	11,853.72
Workforce Training	1,975.05	1.29	0.09	0.29	2,034.36
Public Transit Hub	7,836.77	1.80	0.34	1.05	7,983.70
Research and Development	23,385.29	22.05	1.44	7.93	24,373.89
Commercial	61,400.59	10.39	2.95	8.28	62,548.23
Emergency Services	7,203.79	13.06	0.44	22.35	7,682.50

Table 3-6. Estimated Annual Interim Operational Greenhouse Gas Emissions by Land Use – Phase 2 (2045)

Land Use	CO_2	CH_4	N_2O	R	CO_2e
	Metric Tons per Year				
Geothermal	19,669.60	45.96	0.96	68.86	21,172.34
Mineral Recovery, Processing, and Production	16,660.13	134.40	2.45	176.30	20,927.31
Battery Manufacturing	56,787.70	76.60	2.64	130.38	59,621.14
Green Hydrogen	19,657.01	45.96	0.96	68.86	21,159.71
Anaerobic Digestor	1,801.02	14.19	0.39	2.36	2,274.21
Wastewater Treatment Plant	12,216.24	8.52	0.58	17.05	12,619.87
Water Storage Facility	3.80	0.00	0.00	0.00	3.85
Data Centers	21,029.04	53.56	0.95	116.57	22,766.29
Business Industrial Parks	14,883.15	15.59	0.43	51.55	15,453.55
Automobile Manufacturing	6,836.88	5.84	0.21	16.05	7,063.01
Manufacturing of Green Industrial Equipment	20,870.22	17.53	0.72	48.17	21,571.65
Wholesale Distribution	111,258.92	35.38	3.63	2,276.38	115,501.94
Logistics and Warehousing	74,237.60	23.60	2.42	1,517.59	77,066.89
Outdoor Storage of Trucks, Trailers, and Shipping Containers	306.79	0.01	0.01	0.04	310.82
Intermodal Rail Hub	23,217.02	16.72	0.40	0.70	23,753.61
Electric Vehicle Charging Stations	0.00	0.00	0.00	0.00	0.00
				Total	543,299.05

Notes: CO_2 = carbon dioxide; CH_4 = methane; N_2O = nitrous oxide; R= refrigerant; CO_2e = carbon dioxide equivalent.
Totals may not sum due to rounding.
Emissions shown in Table 3-6 reflect the implementation of Program HP-7 during operation.
See Appendix B, Operational CalEEMod Files, for complete results.

As shown in Table 3-6, operation of the project in Phase 2 in 2045 would result in approximately 543,299 MT CO_2e per year.

Table 3-7 shows the annual GHG emissions associated with buildout LVSP operation for each land use after Phase 3 construction (year 2055). Details of the emission calculations are provided in Appendix B.

Table 3-7. Estimated Annual Interim Operational Greenhouse Gas Emissions by Land Use – Buildout (2055)

Land Use	CO_2	CH_4	N_2O	R	CO_2e
	Metric Tons per Year				
Solar	104.80	6.84	0.00	143.40	419.24
Substations	109.09	8.78	0.00	11.95	340.68
Battery Energy Storage System	240.14	18.91	0.00	106.99	820.07
Agrivoltaics	—	—	—	—	—
Floatovoltaics	14.60	0.11	0.00	5.97	23.42
Restoration/ Passive Uses	76.73	7.67	0.00	0.00	268.45
Parks	265.03	0.08	0.01	0.02	270.42
Housing	3,285.02	2.41	0.16	0.36	3,394.29
Temporary Workforce Housing	11,321.23	32.28	0.97	1.89	12,419.86
Workforce Training	1,950.65	1.29	0.09	0.16	2,009.28
Public Transit Hub	7,737.49	1.79	0.33	0.52	7,881.64
Research and Development	30,939.40	27.07	1.95	8.43	32,204.78
Commercial	60,622.76	10.32	2.89	4.17	61,746.65
Emergency Services	8,729.33	16.11	0.56	26.39	9,325.01
Geothermal	33,598.90	384.20	7.09	542.41	45,857.73
Mineral Recovery, Processing, and Production	20,070.06	161.16	2.97	210.87	25,195.61
Battery Manufacturing	65,825.92	99.27	3.56	175.67	69,545.52
Green Hydrogen	26,103.43	59.57	1.25	89.88	28,056.30
Anaerobic Digestor	3,531.89	18.57	0.56	4.50	4,166.69
Wastewater Treatment Plant	17,877.97	11.93	0.89	23.68	18,465.71
Water Storage Facility	3.83	0.00	0.00	0.00	3.89
Data Centers	28,259.07	71.51	1.29	155.56	30,587.37
Business Industrial Parks	18,350.22	19.62	0.58	62.67	19,074.76
Automobile Manufacturing	11,403.56	9.53	0.42	25.72	11,791.59
Manufacturing of Green Industrial Equipment	34,245.11	28.60	1.25	77.17	35,409.31

Table 3-7. Estimated Annual Interim Operational Greenhouse Gas Emissions by Land Use – Buildout (2055)

Land Use	CO_2	CH_4	N_2O	R	CO_2e
	Metric Tons per Year				
Wholesale Distribution	119,687.06	38.21	3.88	2,456.74	124,255.88
Logistics and Warehousing	80,140.85	42.02	2.98	1,637.83	83,717.94
Outdoor Storage of Trucks, Trailers, and Shipping Containers	338.36	0.01	0.02	0.02	343.08
Intermodal Rail Hub	23,856.23	18.00	0.44	0.36	24,436.67
Electric Vehicle Charging Stations	0.00	0.00	0.00	0.00	0.00
				Total	652,031.84

Notes: CO_2 = carbon dioxide; CH_4 = methane; N_2O = nitrous oxide; R= refrigerant; CO_2e = carbon dioxide equivalent;— = no data available.
Totals may not sum due to rounding.
Emissions shown in Table 3-7 reflect the implementation of Program HP-7 during operation.
See Appendix B, Operational CalEEMod Files, for complete results.

As shown in Table 3-7, operation of the LVSP buildout in 2055 would result in approximately 652,032 MT CO_2e per year.

The estimated operational GHG emissions by emissions source are shown in the tables below for each interim operational year and buildout, and the total emissions are compared to thresholds.

Table 3-8 presents estimated annual operational GHG emissions from Phase 1 in 2035.

Table 3-8. Estimated Annual Operational Greenhouse Gas Emissions – Phase 1 – 2035

Emission Source	CO_2	CH_4	N_2O	R	CO_2e
	Metric Tons per Year				
Mobile	164,869.77	3.40	8.17	95.18	171,177.16
Area	557.20	0.02	0.00	0.00	559.21
Energy	532,548.03	70.47	8.38	0.00	536,807.48
Water	9,216.36	320.52	7.70	0.00	19,522.49
Waste	2,670.24	266.88	0.00	0.00	9,342.25
Refrigerants	0.00	0.00	0.00	2,752.91	2,752.91
Off-Road	86,456.24	3.51	0.70	0.00	86,752.94
Stationary	24,184.69	0.69	0.24	0.00	24,274.95
Total	**820,502.54**	**665.49**	**25.19**	**2,848.09**	**851,189.39**
				Amortized 30-Year Construction Emissions[a]	*17,525.90*
				Phase 1 Operation + Amortized Construction Total	**868,715.29**
				Threshold	*3,000*
				Exceeds Threshold?	**Yes**

Notes: CO_2 = carbon dioxide; CH_4 = methane; N_2O = nitrous oxide; R= refrigerant; CO_2e = carbon dioxide equivalent.

Totals may not sum due to rounding.
Emissions shown in Table 3-8 reflect the implementation of Program HP-7 during operation.
See Appendix B, Operational CalEEMod Files, for complete results.
[a] Emissions are representative of total Phase 1 construction emissions over 30 years (See Table 3-4).

As shown in Table 3-8, operation of Phase 1 in 2035 would result in approximately 868,715 MT CO_2e per year, which exceeds the threshold of 3,000 MT CO_2e per year.

Table 3-9 presents estimated annual operational GHG emissions from Phases 1 and 2.

Table 3-9. Estimated Annual Operational Greenhouse Gas Emissions – Phases 1 and 2 – 2045

Emission Source	CO_2	CH_4	N_2O	R	CO_2e
	Metric Tons per Year				
Mobile	276,738.89	4.94	14.92	36.73	285,933.49
Area	852.35	0.04	0.01	0.00	855.42
Energy	30,539.60	2.70	0.06	0.00	30,624.31
Water	3,811.00	390.77	9.28	0.00	16,347.21
Waste	3,987.52	398.54	0.00	0.00	13,950.98
Refrigerants	0.00	0.00	0.00	5,120.14	5,120.14
Off-Road	179,774.51	7.29	1.46	0.00	180,391.45
Stationary	28,775.21	0.88	0.28	0.00	28,880.79
Total	**524,479.08**	**805.16**	**26.01**	**5,156.87**	**562,103.79**
				Amortized 30-Year Construction Emissions[a]	*11,233.97*
				Phases 1 and 2 Operation + Amortized Construction Total	**573,337.76**
				Threshold	*3,000*
				Exceeds Threshold?	**Yes**

Notes: CO_2 = carbon dioxide; CH_4 = methane; N_2O = nitrous oxide; R= refrigerant; CO_2e = carbon dioxide equivalent.
Totals may not sum due to rounding.
Emissions shown in Table 3-9 reflect the implementation of Program HP-7 during operation.
See Appendix B, Operational CalEEMod Files, for complete results.
[a] Emissions are representative of the total construction emissions from Phases 1+2 over 30 years (See Table 3-4).

As shown in Table 3-9, operation of Phases 1 and 2 in 2045 would result in approximately 573,338 MT CO_2e per year, which exceeds the threshold of 3,000 MT CO_2e per year.

Table 3-10 presents estimated annual operational GHG emissions from buildout of the LVSP.

Table 3-10. Estimated Annual Operational Greenhouse Gas Emissions – Phase 3 – 2055 (Buildout)

Emission Source	CO_2	CH_4	N_2O	R	CO_2e
	Metric Tons per Year				
Mobile	333,324.02	5.62	18.14	20.99	345,488.23
Area	1,043.11	0.04	0.01	0.00	1,046.86
Energy	35,270.43	3.12	0.07	0.00	35,368.26

Table 3-10. Estimated Annual Operational Greenhouse Gas Emissions – Phase 3 – 2055 (Buildout)

Emission Source	CO_2	CH_4	N_2O	R	CO_2e
	Metric Tons per Year				
Water	5,748.45	589.44	14.00	0.00	24,657.84
Waste	4,890.39	488.78	0.00	0.00	17,109.83
Refrigerants	0.00	0.00	0.00	5,752.36	5,752.36
Off-Road	190,214.19	7.72	1.54	0.00	190,866.95
Stationary	38,198.12	1.16	0.37	0.00	38,338.34
Total	**608,688.72**	**1,095.87**	**34.14**	**5,773.35**	**658,628.68**
				Amortized 30-Year Construction Emissions[a]	*28,759.87*
				Buildout Operation + Amortized Construction Total	**687,388.55**
				Threshold	*3,000*
				Exceeds Threshold?	**Yes**

Notes: CO_2 = carbon dioxide; CH_4 = methane; N_2O = nitrous oxide; R= refrigerant; CO_2e = carbon dioxide equivalent.
Totals may not sum due to rounding.
Emissions shown in Table 3-10 reflect the implementation of Program HP-7 during operation.
See Appendix B, Operational CalEEMod Files, for complete results.
[a] Emissions are representative of the total construction emissions from Phases 1+2+3 over 30 years (See Table 3-4).

As shown in Table 3-10, operation of the buildout of the LVSP would result in approximately 687,389 MT CO_2e per year, which exceeds the threshold of 3,000 MT CO_2e per year, as well as baseline emissions (0 MT CO_2e per year).[24]

Although not quantified in this analysis, as explained above, geothermal and solar (floatovoltaics) would be included in the buildout of the LVSP, which are eligible renewables in the RPS program to help the state meet its goals to decarbonize the grid by 2045. The project would also include rooftop solar, which would provide on-site energy to help meet regional grid demand and reduce consumption in the Plan Area. Although SB 100 requires California's grid to achieve zero GHG emissions by 2045, the continued development of these renewable energy facilities would remain critical for the state to achieve this goal. As such, although not quantified, GHG emissions from on-site renewable energy sources is anticipated to reduce project-generated energy source GHG emissions.

In summary, operation of the LVSP plus amortized construction GHG emissions would exceed the applied threshold of 3,000 MT CO_2e per year, as well as baseline emissions (0 MT CO_2e per year) in Phase 1 (2035), Phase 2 (2045), and Phase 3 (2055). As such, the project would result in a significant impact per Threshold 1 (potential to generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment) prior to mitigation.

Global Comparison

The purpose of the global comparison is to evaluate the broader GHG emissions reduction benefits of the LVSP that may not be captured through industry standard CEQA thresholds. The global comparison does not rely on a numerical threshold but instead evaluates how the LVSP supports global decarbonization through the

[24] For the purposes of this GHG emissions analysis, baseline emissions are assumed to be 0 metric tons carbon dioxide equivalent per year, which is conservative because existing operation of the Specific Plan Area would generate GHG emissions from various sources.

development of clean energy facilities, the increase of the domestic lithium supply chain, and the transition to zero-emission technologies.

The implementation of the LVSP would support the development of the lithium supply chain, including extraction and battery production, thereby offering substantial potential for long-term global GHG reductions beyond those required under CEQA, as detailed below.

Meeting the Growing Demand for Lithium

The growing demand for lithium is underscored by the goals and forecasts of the 2022 Scoping Plan, which calls for increased battery EV adoption, increased battery storage, and for 20% of aviation fuel demand to be met by battery-powered electrification/fuel cells, with a transition to zero-emission technologies by 2045. The 2022 Scoping Plan identifies a demand for "11 million battery electric and hydrogen fuel cell vehicles in 2035 and over 23 million battery electric and hydrogen fuel cell vehicles in 2045" (CARB 2022). The 2022 Scoping Plan further explains that although renewably sourced energy is abundant during off-peak hours, the grid cannot fully meet peak evening demand (when solar generation declines) with renewable electricity. To address this challenge and provide reserves for renewably sourced electricity, the 2022 Scoping Plan highlights the importance of BESS systems, estimating a demand of 37 gigawatts of battery storage by 2045 (CARB 2022).

The LVSP would help to meet this demand by developing a large-scale supply of lithium, an essential component of batteries used in EVs and grid-scale storage systems. The Plan Area is estimated to contain up to 18 million MT of lithium carbonate equivalent (LCE) (Berkeley Lab 2022) and is one of the largest known lithium reserves in the country. Full buildout of the LVSP would include the development of up to 17 direct lithium extraction facilities, which are projected to yield approximately 578,000 MT of LCE per year.[25] By comparison, total global production in 2024, excluding domestic production, was approximated at 240,000 MT of LCE (USGS 2024). As discussed in the Lithium Valley Blue Ribbon Commission Report, under existing conditions "almost all of the global lithium supply is mined in Argentina, Chile, China, and Australia," and the global lithium demand is "expected to grow as much as tenfold in the next decade, but virtually none is produced in the United States" (Paz et al. 2022). The lithium produced by the LVSP could support the manufacture of over 16 million 60-kilowatt lithium-ion batteries, to be used for both grid-scale energy storage and EVs (Paz et al. 2022). Increasing the production of lithium in the region and domestically would help the state and the country to meet the growing demand for battery materials critical to decarbonization.

Benefits of a Domestic Lithium Supply Chain

As discussed above, under existing conditions, lithium extraction, mining, processing, and battery production occur largely overseas, necessitating the United States' large-scale import of lithium battery products. The absence of a fully developed domestic lithium supply chain presents a significant opportunity to reduce global GHG emissions from the lithium battery life cycle. The Lithium Valley Blue Ribbon Commission Report states that "locating the processing and manufacturing of [lithium] products near the source of lithium would be meaningful in realizing the full value and potential environmental benefit of this resource" and that "the state should continue to support the success of environmentally preferable, California-based lithium recovery facilities" (Paz et al. 2022).

[25] The annual lithium carbonate equivalent production for one direct lithium extraction (DLE) facility was conservatively estimated at 34,000 MT based on the design capacity of the Hell's Kitchen Integrated Lithium and Power Project located in the Specific Plan Area. This value reflects a commercially viable DLE scale for the region.

Although some additional domestic lithium supplies have been proposed, the Plan Area, as previously stated, contains one of the largest known lithium reserves in the country. Moreover, California has one of the largest lithium demands in the nation, evinced by the state's aggressive EV and zero-emission technology targets underscored in the CARB 2022 Scoping Plan. In the third quarter of 2024, combined sales of hybrid vehicles, plug-in hybrid EVs, and battery EVs comprised 21.2% of all new California car sales (EIA 2024a), and California accounted for 35% of national EV registrations (USDOE 2024). The LVSP promotes the development of green industrial and manufacturing, with the goal of "compounding, processing, assembling, packaging, treatment or fabrication of materials and products such as lithium batteries and renewable energy plant equipment," with lithium extracted within the Plan Area. The development of a vertically integrated domestic supply chain, from extraction to product production, would reduce global life-cycle emissions by minimizing GHG emissions associated with international transport.

By enabling the development of an integrated domestic lithium supply chain and supporting large-scale electrification, the LVSP would not only help the state reach its GHG reduction and carbon neutrality targets but would also result in indirect global GHG reduction benefits.

Conclusion

Per the Threshold GHG-1a analysis, the project would generate GHG emissions that would exceed the applied threshold of 3,000 MT CO_2e per year. Per the Threshold GHG-1b analysis, although not quantified herein, the project is anticipated to result in global GHG reduction benefits associated with developing a domestic lithium supply. Nonetheless, because the project would result in construction and operational GHG emissions that would exceed the 3,000 MT CO_2e per year threshold, the project would result in a **significant impact without mitigation**.

Mitigation Measures

To reduce potentially significant impacts under Thresholds GHG-1 and GHG-2, MM-GHG-1 through MM-GHG-4 are identified to reduce project-generated construction and operational GHG emissions from various project emission sources. Mitigation measures are grouped into general and land-use-specific mitigation to appropriately address both typical emission sources and the land use emission sources unique to the project. Implementation of MM-TRA-1 through MM-TRA-4, would also reduce GHG emissions through transportation measures and VMT reduction.

MM-GHG-1 Energy Conservation. Prior to the issuance of building permits, the project applicant or its designee shall provide evidence to the County of Imperial that the building design plans include the following energy conservation measures:

- Install Energy Star–rated heating, cooling, lighting, and appliances.
- Outdoor lighting shall be light emitting diode (LED) or other high-efficiency lightbulbs.
- Install double-pane windows where possible.
- Prior to the issuance of building permits, the project applicant or its designee shall submit building plans illustrating installation of cool pavements in place of dark pavements. Outdoor pavements, such as walkways and patios, shall use paving materials with a 3-year solar reflectance index (SRI) of 0.28 or an initial SRI of 0.33.
- Provide information on energy efficiency, energy-efficient lighting and lighting control systems, energy management, and existing energy incentive programs to future residents.

MM-GHG-2 Use Alternative Refrigerants Instead of High-GWP Refrigerants. Refrigerants with high global warming potential (GWP) shall be replaced with lower-GWP refrigerants (e.g., natural refrigerants such as carbon dioxide, ammonia, and hydrocarbons, or next-generation low-GWP synthetic refrigerants like hydrofluoroolefin-1234yf) in refrigeration and air conditioning equipment.

MM-GHG-3 Electric Vehicle Charging Infrastructure. Prior to the issuance of building permits, the project applicant or its designee shall provide evidence to the County of Imperial that the building design plans meet or exceed California Green Building Standards Code Tier 2 standards to encourage the use of electric vehicles.

MM-GHG-4 Sustainable Concrete Building Materials. This mitigation applies to industrial land uses only. The project shall be designed with sustainable materials that will reduce 35% of the overall carbon footprint compared to other traditionally designed concrete tilt buildings. The following measures shall be implemented:

- The future developments shall reduce overall concrete in the slab by 10% through the use of a steel fiber mix to increase the overall strength of the concrete to reduce concrete thickness.
- The future developments shall reduce overall concrete in the tilt walls by 30% by providing 4-inch foam insultation in the middle of the concrete panel (also known as composite panels). Whereas traditional concrete tilt walls have no R-value, the foam insulation will result in an R-value of R-19, thereby reducing overall energy consumption and increasing occupant comfort.
- The roof shall have a 10% reduction in steel because of the lighter concrete tilt walls due to the foam insulation.
- The future developments' specifications shall require the use of sustainable concrete to reduce the project's overall carbon footprint by 35%.

Level of Significance After Mitigation

The above mitigation measures would reduce GHG emissions associated with implementation of the LVSP. However, the effectiveness of all mitigation is not quantifiable, and the LVSP would still exceed the 3,000 MT CO_2e per year threshold in Phase 1 (2035), Phase 2 (2045), and Phase 3 (2055), resulting in a **significant and unavoidable impact**.

3.5.2 Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

As discussed previously, the evaluation herein addresses the LVSP's potential to conflict with GHG reduction plans, namely (1) the CARB 2022 Scoping Plan, (2) SCAG's RTP/SCS, and (3) the ICRCAP.

Project Potential to Conflict with State Reduction Targets and the California Air Resources Board's 2022 Scoping Plan

As discussed above, the California State Legislature passed AB 32 to provide initial direction and initiate the state's long-range climate objectives. Since the passage of AB 32, the state has adopted GHG emission reduction targets

for future years beyond the initial 2020 horizon year. CARB is required to develop the Scoping Plan, which provides the framework for actions to achieve the state's GHG emission reduction targets. The Scoping Plan is the official framework for the measures and regulations that will be implemented to reduce California's GHG emissions in alignment with the state's adopted GHG reduction targets. Therefore, a project would be found to not conflict with the state's climate goals set forth in statutes and regulations if it would meet the Scoping Plan policies and would not impede attainment of the goals therein.

The Second Update included measures to promote renewable energy and energy efficiency (including the mandates of SB 350) and to increase stringency of the LCFS, measures identified in the Mobile Source and Freight Strategies and in the proposed Short-Lived Climate Pollutant Plan, and measures to increase the stringency of SB 375 targets. The 2022 Scoping Plan builds upon and accelerates programs currently in place, including moving to zero-emission transportation; phasing out the use of natural gas for heating homes and buildings; reducing chemical and refrigerants with high GWP; providing communities with sustainable options for walking, biking, and public transit; and displacing fossil-fuel-fired electrical generation through use of renewable energy alternatives (e.g., solar arrays and wind turbines) (CARB 2022). Implementation of the measures and programs included in the 2022 Scoping Plan are largely the responsibility of policymakers and would result in the reduction of project-related GHG emissions with no action required at the project level.

As discussed previously, the 2045 carbon neutrality goal required CARB to expand proposed actions in the 2022 Scoping Plan to include those that capture and store carbon in addition to those that reduce only anthropogenic sources of GHG emissions. The project would support the state's carbon neutrality goals, as implementation includes the addition of urban tree and native plantings throughout the project site; these plantings represent opportunities for potential carbon removal and sequestration over the project lifetime. However, the 2022 Scoping Plan emphasizes that reliance on carbon sequestration in the state's natural and working lands will not be sufficient to address residual GHG emissions, and achieving carbon neutrality will require the research, development, and deployment of additional methods to capture atmospheric GHG emissions (e.g., mechanical direct air capture) (CARB 2022). Given that the specific path to neutrality will require the development of technologies and programs that are not currently known or available, the project's role in supporting the statewide goal would be speculative and cannot be wholly identified at this time.

The CARB 2022 Scoping Plan includes the Scoping Plan Scenario, which serves as a framework in guiding policies and actions to reduce GHG emissions to keep California on track to achieve the SB 32 GHG reduction target for 2030 and become carbon neutral no later than 2045. The Scoping Plan Scenario provides a more drastic reduction of GHG emissions compared to the Reference Scenario identified within the Second Update. Table 2-1 of the 2022 Scoping Plan lists implementable actions to achieve the reductions in the Scoping Plan Scenario. The measurable actions are categorized by AB 32 GHG inventory sectors and are accompanied by statutes and EOs that work to achieve the same or similar goals (CARB 2022). The actions identified in Table 2-1 of the 2022 Scoping Plan that are relevant to the scope of the project are listed below in Table 3-11, along with the project's consistency with each action.

Table 3-11 evaluates the LVSP's potential to conflict with the measures from the CARB 2022 Scoping Plan that are relevant and applicable to the LVSP.

Table 3-11. Project Potential to Conflict with the California Air Resources Board 2022 Scoping Plan

Sector	Action	Potential to Conflict
GHG Emissions Reductions Relative to the SB 32 Target	40% below 1990 levels by 2030	***No conflict.*** Although the SB 32 GHG emissions reduction target is not an Action that is analyzed independently, it is included in Table 2-1 of the 2022 Scoping Plan for reference. The LVSP is not expected to obstruct or interfere with agency efforts to meet the SB 32 reduction goal; As discussed under GHG-a,t he LVSP includes local sources of lithium and development of solar and geothermal facilities, which are an important baseload component for achieving the State's Renewable Portfolio goals.
Smart Growth/VMT	VMT per capita reduced 25% below 2019 levels by 2030, and 30% below 2019 levels by 2045	***Partial Inconsistency.*** The project's VMT impacts are significant and unavoidable. Therefore, the development of the LVSP would potentially obstruct or interfere with agency efforts to meet this regional VMT reduction goal, including through implementation of SB 375. Nonetheless, MM-TRA-1 through MM-TRA-4 would be implemented in the LVSP to enhance transit access and connectivity of the project within the County.
Light-Duty Vehicles Zero-Emission Vehicles	100% of LDV sales ZEV by 2035	***No conflict.*** As this action pertains to LDV sales within California, the project would not obstruct or interfere with its implementation. Furthermore, the LVSP would support the transition from fossil fuel LDV to ZEV through its development of EV charging stations as a primary land use; buildout of the LVSP would include over 18 acres of built EV charging station area, serving both passenger EVs and EV trucks.
Truck ZEVs	100% of MDV/ HDV sales ZEV by 2040	***No conflict.*** As this action pertains to MDV and HDV sales within California, the project would not obstruct or interfere with its implementation. Furthermore, the LVSP would support the transition from fossil fuel LDV to ZEV through its development of EV charging stations as a primary land use; buildout of the LVSP would include over 18 acres of built EV charging station area, serving both passenger EVs and EV trucks.

Table 3-11. Project Potential to Conflict with the California Air Resources Board 2022 Scoping Plan

Sector	Action	Potential to Conflict
Freight and Passenger Rail	100% of passenger and other locomotive sales ZEV by 2030 100% of line haul locomotive sales ZEV by 2035 Line haul and passenger rail rely primarily on hydrogen fuel cell technology, and others primarily use electricity.	***No conflict.*** As this action pertains to the sale of locomotives, the project would not obstruct or interfere with its implementation. The project would comply with CARB line haul locomotive regulations. As described in Policy CT-14 of the LVSP, sustainable freight transport modes would be promoted and regional economic competitiveness would be enhanced through efficient cross-border trade operations, realizing benefits such as reduced emissions. In addition, as described in Policy HP-13 of the LVSP, the County would continue to work with the Imperial County Transit Commission to offer zero-emission transportation methods throughout the North End of Imperial County.
Electricity Generation	Sector GHG target of 38 million metric tons of MMT CO_2e in 2030 and 30 MMT CO_2e in 2035 Retail sales load coverage[1] 20 gigawatts of offshore wind by 2045 Meet increased demand for electrification without new fossil gas-fired resources	***No conflict***. As this action pertains to the statewide procurement of renewable energy, the LVSP would not obstruct or interfere with its implementation. Furthermore, the LVSP's fundamental purpose is to provide a streamlined process for geothermal energy production and lithium extraction, processing, production, and manufacturing that will assist in the country's need to quickly transition to renewable energy. Additionally, the LVSP would include the development of renewable and clean energy-generating infrastructure, including geothermal, solar fields, BESS facilities, agrivoltaics, and floatovoltaics.
New Residential and Commercial Buildings	All-electric appliances beginning 2026 (residential) and 2029 (commercial), contributing to 6 million heat pumps installed statewide by 2030	***Potential conflict.*** The project would not require all-electric appliances in new residential and commercial buildings. Therefore, the LVSP would potentially obstruct or interfere with CARB's efforts to meet the all-electric appliance and heat pump goals.
Food Products	7.5% of energy demand electrified directly and/or indirectly by 2030; 75% by 2045	***No conflict.*** The LVSP does not include the development of food product manufacturing and would therefore not conflict with goals related to energy demand of food products. Furthermore, the LVSP would include renewable energy

Table 3-11. Project Potential to Conflict with the California Air Resources Board 2022 Scoping Plan

Sector	Action	Potential to Conflict
		generation (geothermal, solar), which supports the electrification of the gird.
Construction Equipment	25% of energy demand electrified by 2030; 75% electrified by 2045	***No conflict.*** As this action pertains to the electrification of off-road equipment across California, the project would not obstruct or interfere with its implementation. The LVSP HP-7 Program requires construction equipment with higher-tier engines and all operational off-road equipment to be outfitted with U.S. Environmental Protection Agency–rated Tier 4 Final engines. Moreover, Program HP-7 includes that electric-powered or zero-emission equipment is encouraged to be used when feasible.
Other Industrial Manufacturing	0% energy demand electrified by 2030; 50% by 2045	***No conflict.*** The project would not obstruct or interfere with CARB's efforts to meet 0% energy demand electrified by 2030 and 50% by 2045. As described in the LVSP and in Section 2.2.3.3, Program I-17 requires, where feasible, that the County shall supply municipal facilities with on-site renewable electricity. Policy LU-10 requires that solar photovoltaic systems would be installed with a generation capacity at least 25% greater than the minimum requirements established by the 2022 California Building Standards Code. Where feasible, alternative renewable energy sources (e.g., geothermal) would be implemented to supplement on-site solar energy production. Policy HP-9 requires that the use of 95% (on average) renewable energy in the mineral process would be mandated by 2040. Lastly, data centers must be powered on average by 30% or more from renewable energy sources, and carbon neutral by 2045.
Agriculture Energy Use	25% energy demand electrified by 2030; 75% by 2045	***No conflict.*** The LVSP would not obstruct or interfere with CARB's efforts to electrify energy demand related to agricultural production.
Low-Carbon Fuels for Transportation	Biomass supply used to produce conventional and advanced biofuels, as well as hydrogen	***No conflict***. The LVSP would not obstruct or interfere with CARB's efforts to increase the provision of low carbon fuels for transportation. The development and

Table 3-11. Project Potential to Conflict with the California Air Resources Board 2022 Scoping Plan

Sector	Action	Potential to Conflict
		use of biofuels in trucks and automobiles would occur at the state and regional level.
Low-Carbon Fuels for Buildings and Industry	In 2030s, biomethane blended in pipeline Renewable hydrogen blended in fossil gas pipeline at 7% energy (~20% by volume), ramping up between 2030 and 2040 In 2030s, dedicated hydrogen pipelines constructed to serve certain industrial clusters	***No conflict.*** The LVSP would not obstruct or interfere with CARB's efforts to increase the provision of low carbon fuels for use in buildings and industry. The blending of biomethane and use of renewable hydrogen in existing natural gas pipelines would happen at the scale of the utility provider and without action required by the project.
Noncombustion Methane Emissions	Increase landfill and dairy digester methane capture Some alternative manure management deployed for smaller dairies Moderate adoption of enteric strategies by 2030 Divert 75% of organic waste from landfills by 2025 Oil and gas fugitive methane emissions reduced by 50% by 2030 and further reductions as infrastructure components retire in line with reduced fossil gas demand	***No conflict.*** The LVSP would not obstruct or interfere with CARB's efforts to reduce noncombustion methane emissions. As described in Policy I-12 through Policy I-20 of the LVSP, various waste policies would ensure compliance with all regulations.
High-GWP Potential Emissions	Low-GWP refrigerants introduced as building electrification increases, mitigating HFC emissions	***No conflict.*** The LVSP would not obstruct or interfere with agency efforts to introduce low-GWP refrigerants. The State has established a prohibition on the sale or distribution of bulk HFCs identified as having a high GWP through SB 1206.
Natural and Working Lands	Conserve 30% of the state's natural and working lands and coastal waters by 2030. Implement near- and long-term actions to accelerate natural removal of carbon and build climate resilience in our forests, wetlands, urban greenspaces, agricultural soils, and land conservation activities in ways that serve all communities—and in particular low-income, disadvantaged, and vulnerable communities.	***Potential conflict.*** Because the LVSP would convert lands that are currently used for agriculture, it would potentially conflict with the 2022 Scoping Plan goal to conserve natural and working lands.

Table 3-11. Project Potential to Conflict with the California Air Resources Board 2022 Scoping Plan

Sector	Action	Potential to Conflict
Forests and Shrublands	At least 2.3 million acres treated statewide annually in forests, shrublands/chaparral, and grasslands, comprising regionally specific management strategies that include prescribed fire, thinning, harvesting, and other management actions. No land conversion of forests, shrublands/chaparral, or grasslands.	***No conflict.*** The Lithium Valley region does not include forests, shrublands, or grasslands and is characterized instead as an arid desert region, with a large portion currently used for agriculture. The LVSP would therefore not contribute to forest thinning or the conversion of shrublands or grasslands. Additionally, the LVSP would include the restoration and preservation of the natural ecosystems within the LVSP area, including the Salton Sea playas and river corridor.

Source: CARB 2022.
Note: SB = Senate Bill; GHG = greenhouse gas; LVSP = Lithium Valley Specific Plan; VMT = vehicle miles traveled; MM = Mitigation Measure; LDV = light-duty vehicles; ZEV = zero-emission vehicle; EV = electric vehicle; MDV = medium-duty vehicle; HDV = heavy-duty vehicle; CARB = California Air Resources Board; MMT CO_2e = million metric tons carbon dioxide equivalent; HFC = hydrofluorocarbon; Scoping Plan = 2022 Scoping Plan for Achieving Carbon Neutrality.

the LVSP would support the overarching goals of the 2022 Scoping Plan and the underlying statewide GHG reduction targets, including providing clean, renewable energy, including baseload or nonintermittent energy, to the grid through geothermal. The County acknowledges the partial inconsistency with VMT, electrification of new residential and commercial buildings and conversion of working lands goals. However, as discussed under Impact GHG-a, Global Comparison, the 2022 Scoping Plan highlights the significance of lithium batteries and the transition to zero-emission technologies to achieve state GHG reduction goals, explaining that "[d]ecarbonizing the electricity sector is a crucial pillar of this Scoping Plan. It depends on … replacing fossil-fueled generation with renewable and zero-carbon resources, including solar, wind, energy storage, geothermal, biomass, and hydroelectric power." However, to achieve these goals, "other resources such as storage and demand-side management are essential to maintain reliability with high concentrations of renewables." The 2022 Scoping Plan acknowledges the "integration of greater amounts of variable renewable generation resources is changing power system planning and operations, and system operators need resources with flexible attributes to balance shifting supply and demand." That discussion further notes the growing need for nonvariable renewable generation and expressly identifies "geothermal, biomass, and dam-based hydroelectric power" as assisting in evening out our variable renewable energy generation (CARB 2022). Buildout of the LVSP includes the development of 2,550 MW of geothermal power plants. The co-development of geothermal power facilities also improves electric grid stability, grid reliability, and grid resiliency because such facilities "provide a sustainable and stable source of electricity and are characterized as a baseload renewable resource"; such power facilities also "help to restart the grid" (Paz et al. 2022).

As such, although the project may conflict with some specific actions in the state's 2022 Scoping Plan, such as VMT reduction, due to the nature of the Plan Area location, the project would on the whole facilitate achieving other key statewide GHG reduction goals, such as decarbonizing our transportation and energy sectors. In fact, transportation electrification and building decarbonization are two of the three priority areas that CARB recommends local jurisdictions focus on for climate action as part of Appendix D of the 2022 Scoping Plan; the project would support these priority areas. For all the reasons discussed above, buildout of the LVSP would therefore not conflict with the overall goals of CARB's 2022 Scoping Plan.

Project Potential to Conflict with the Imperial County Regional Climate Action Plan

The LVSP's potential to conflict with the relevant measures identified within the ICRCAP is discussed in Table 3-12 below.

Table 3-12. Project Consistency with the Imperial County Regional Climate Action Plan

Measure		Project Potential to Conflict
Goal: Transportation		
T-1.2	Plan and implement a system of bicycle lanes and multi-use trails that link the cities, unincorporated communities, schools, commercial/retail, employment centers, health care service facilities, public transportation, and other points of interest.	***No conflict***. The LVSP would implement a bicycle circulation and transportation network that includes routes that take into consideration bicyclist safety. In addition, as described in LVSP Policy CT-13, the County would support the diversification of travel modes used in Lithium Valley to increase employee trips made by bicycle or public transit, including new mobility types like electric shuttles, electric vanpool/carpool, electric carsharing service, docked bikeshare, and e-scooter sharing to link communities. The designated bike routes would connect to commercial nodes and transportation hubs in the local area.
T-2.2	Synchronize traffic signals to reduce idling.	***No conflict.*** As described in the LVSP, the project would implement intelligent transportation systems and signalized intersections to optimize traffic flow and reduce congestion.
T-2.4	Work with the air district to establish an incentive program to trade in fossil fuel-powered landscaping equipment with electric versions.	***No conflict***. The LVSP would implement Mitigation Measure AQ-7, Landscape Maintenance Equipment Emission Reduction, which would require educational materials to be provided to future residents about the ICAPCD Lawn Equipment Exchange Program.
T-3.2	Install public electric vehicle (EV) charging stations.	***No conflict***. As described in the LVSP, the project would allow the development of EV charging stations as a primary use.
T-3.3	Require electric vehicle charging stations at new non-residential developments.	***No conflict***. As described in Policy HP-4, the project would facilitate the deployment of EV charging infrastructure through the collaboration with local organizations to identify the best locations, funding mechanisms, and maintenance plans for EV charging stations.
Goal: Energy		
E-1.3	Reduce or eliminate natural gas and propane consumption in new and existing residential buildings.	***No conflict***. The LVSP does not promote or incentivize natural gas. However, it is legally infeasible for the County to prohibit natural gas consumption (*California Restaurant Association v. City of Berkeley* [2023] 65 F.4th 1045).
E-2.3	Require large parking lots for new commercial development projects to include solar canopies to produce on-site renewable energy and provide shading for energy efficiency benefits.	***No conflict***. The LVSP would support the development of on-site solar, which is the installation and operation of solar energy production systems that provide renewable energy to other on-site industrial or commercial uses. On-site solar may be roof-mounted, installed over parking lots or carports, or an ancillary solar farm.

Table 3-12. Project Consistency with the Imperial County Regional Climate Action Plan

Measure		Project Potential to Conflict
E-2.6	Establish or join program to increase grid-supply renewable and zero-carbon electricity.	*No conflict*. The LVSP would support the development of microgrids and distributed energy systems, as well as the integration of renewable energy storage batteries into the grid.
Goal: Waste		
WS- 1.2	Promote alternative uses of agricultural and organic waste by promoting the construction of composting and anaerobic digestion facilities.	*No conflict*. The LVSP would allow the development of anaerobic digestion facilities as a primary use in the Plan Area. Furthermore, as described in Policy I-20, the LVSP would explore opportunities for converting nonrecyclable waste into energy through advanced technologies like anaerobic digestion or waste-to-energy facilities, contributing to renewable energy goals.
WS-1.3	Create waste diversion ordinances for construction projects.	*No conflict*. As described in Policy I-16, the LVSP would establish and monitor comprehensive waste diversion targets for construction through regular audit and transparent reporting to stakeholders.
Goal: Agriculture		
AG-1.1	Work with utilities and/or air districts to provide incentives such as CARB's FARMER program to convert stationary diesel- or gas-powered irrigation pumps to electric pumps that are connected to the grid or use off-grid alternative/renewable energy sources, such as solar.	*No conflict*. The LVSP supports the County's broader sustainability and electrification goals by facilitating the transition of agricultural lands to green industrial and clean energy infrastructure. Although the plan would reduce agricultural operations in the Plan Area, it would not preclude the implementation of incentive programs such as the California Air Resources Board's FARMER program, in other areas of the County.
AG-1.3	Provide incentives for replacing gas- or diesel-powered agricultural equipment with electric or alternatively fueled equivalents.	
AG-2.1	Consider various agricultural land and open space conservation strategies that allow developers to preserve lands and/or increase residential development density in smart growth infill areas by removing development potential of lands.	*No conflict*. Although the LVSP would support the development of existing agricultural lands within the Plan Area, by confining establishing a specific development zone, the LVSP includes the implementation of specific conservation areas and designed open spaces to protect areas of environmental, cultural, and tribal significance and promote retaining areas for restoration and mitigation projects. Furthermore, the LVSP facilitates smart growth in the region by creating jobs in proximity to disadvantaged communities, thereby reducing the need for long-distance commuting and enabling future opportunities for housing in nearby urbanized areas.
AG-2.2	Target stream restoration programs and riparian restoration strategies for carbon sequestration, natural heat relief, water quality improvements, and/or wildlife habitat mitigation.	*No conflict*. As described in the LU-3 Program, the LVSP would target restoration programs and riparian restoration strategies for carbon sequestration, natural heat relief, water quality improvements, and/or wildlife habitat mitigation.

Table 3-12. Project Consistency with the Imperial County Regional Climate Action Plan

Measure		Project Potential to Conflict
AG-2.4	Develop and enforce landscape tree requirement for new developments.	*No conflict*. As described in the LVSP, the LVSP would develop and enforce landscape tree requirements based on the land use designation, including landscaping of medians, parkways, and parking lots, and revegetation of salt-tolerant trees in the playa zones.

Source: Imperial County Transportation Commission 2021.

Note: LVSP = Lithium Valley Specific Plan; County = County of Imperial; ICAPCD = Imperial County Air Pollution Control District; EV = electric vehicle; Plan Area = Specific Plan Area.

As discussed in Table 3-12 above, the LVSP would not conflict with the ICRCAP. The LVSP would support, as feasible, the measures and overarching goals therein to address the impacts of climate change and reduce GHG emissions in the region. Therefore, impacts would be less than significant.

Conclusion

Based on the above considerations, the LVSP would not conflict with the overall goals within the CARB 2022 Scoping Plan or the ICRCAP. This impact would be **less than significant**.

Level of Significance Before Mitigation

This impact would be less than significant.

Mitigation Measures

No mitigation is required.

Level of Significance After Mitigation

Impacts would be **less than significant** without mitigation.

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4 Energy

4.1 Environmental Setting

4.1.1 Electricity

According to the U.S. Energy Information Administration, California used approximately 239,480,452 MWh of electricity in 2023 (EIA 2024b). Electricity usage in California for different land uses varies substantially by the types of uses in a building, type of construction materials used in a building, and the efficiency of all electricity-consuming devices within a building. Due to the state's energy efficiency building standards and efficiency and conservation programs, California's electricity use per capita in the residential sector is lower than any other state except Hawai'i (EIA 2024c).

IID would provide electricity to the LVSP. IID is a public power utility, providing electricity to its service area, which covers 6,471 square miles, including all of Imperial County along with parts of Riverside and San Diego counties (IID 2025a). According to the 2024 IID Power Content Label, renewable energy sources account for 27% of IID's overall energy resources (IID 2025b). In 2023, IID's total electricity sales were 3,403,891 MWh (CEC 2025a). By 2040, the CEC forecasts that IID's total electricity sales will be 4,582,000 MWh, which is the latest year that forecasts are available (CEC 2024b).

4.1.2 Natural Gas

According to the U.S. Energy Information Administration, California used approximately 2,087 billion cubic feet of natural gas in 2023 (EIA 2025a). The majority of California's natural gas customers are residential and small commercial customers (core customers). These customers account for approximately 35% of the natural gas delivered by California utilities (CPUC 2025). Large consumers, such as electric generators and industrial customers (noncore customers), account for approximately 65% of the natural gas delivered by California utilities (CPUC 2025). CPUC regulates California natural gas rates and natural gas services, including in-state transportation over transmission and distribution pipeline systems, storage, procurement, metering, and billing. Most of the natural gas used in California comes from out-of-state natural gas basins. Consistent with SB 1440 [2018] and CPUC Decision 22002-025, the Southern California Gas Company (SoCalGas) began providing renewable gas into their pipeline systems in 2019 (SoCalGas 2025).

SoCalGas provides Imperial County with natural gas service. SoCalGas's service territory encompasses approximately 20,000 square miles and more than 500 communities. SoCalGas's 2024 California Gas Report projects total cumulative gas demand to decline at an annual rate of 0.7% from 2024 to 2040 (California Gas and Electric Utilities 2024). The total capacity of natural gas available to SoCalGas in 2024 is estimated to be 3.8 billion cubic feet per day. In 2040, the total capacity available is also estimated to be 3.8 billion cubic feet per day[26] (California Gas and Electric Utilities 2024). This amount is approximately equivalent to 3.88 billion thousand British thermal units (kBTU) per day or 38.8 million therms per day. In 2022, SoCalGas delivered approximately 41 million therms (4.1 billion kBTU) to Imperial County (CEC 2025b). By 2040, SoCalGas forecasts that its natural gas capacity

[26] One cubic foot of natural gas has approximately 1,020 British thermal units (BTU) of natural gas or 1.02 thousand British thermal units (kBTU) of natural gas.

will be 3,775 million cubic feet per day, or 1,415 trillion kBTU per year, which is the latest year that forecasts are available (California Gas and Electric Utilities 2024).

4.1.3 Petroleum

According to the U.S. Energy Information Administration, California used approximately 648 million barrels, or 27.2 billion gallons, of petroleum in 2023, with the majority (555 million barrels) used for the transportation sector (EIA 2025b). There are 42 U.S. gallons in a barrel, so this equates to a total daily use of approximately 27.2 billion gallons of petroleum among all sectors and 23.3 billion gallons for the transportation sector. In California, petroleum fuels refined from crude oil are the dominant source of energy for transportation sources. Petroleum usage in California includes petroleum products such as motor gasoline, distillate fuel, liquefied petroleum gases, and jet fuel. California has implemented policies to improve vehicle efficiency and to support use of alternative transportation, which are described in Section 3.2.2.

4.2 Regulatory Setting

4.2.1 Federal Regulations

Federal Energy Policy and Conservation Act

In 1975, Congress enacted the Federal Energy Policy and Conservation Act, which established the first fuel economy standards for on-road motor vehicles in the United States. Pursuant to the act, the NHTSA is responsible for establishing additional vehicle standards. In 2012, new fuel economy standards for passenger cars and light trucks were approved for model years 2017 through 2021 (77 FR 62624–63200). Fuel economy is determined based on each manufacturer's average fuel economy for the fleet of vehicles available for sale in the United States.

Energy Policy Act of 2005

In January 2005, the Energy Policy Act was signed into law. It addresses energy production in the United States, including energy efficiency, renewable energy, oil and gas, coal, tribal energy, nuclear matters and security, vehicles, and motor fuels, including ethanol, hydrogen, electricity, energy tax incentives, hydropower and geothermal energy, and climate change technology. The Energy Policy Act provides loan guarantees for entities that develop or use innovative technologies that avoid the by-production of GHGs. Another provision of the Energy Policy Act is the RFS, which increases the amount of biofuel that must be mixed with gasoline sold in the United States.

Energy Independence and Security Act of 2007

On December 19, 2007, the EISA was signed into law (EPA 2007). In addition to setting increased Corporate Average Fuel Economy standards for motor vehicles, the EISA includes the following other provisions related to energy efficiency:

- RFS (Section 202)
- Appliance and lighting efficiency standards (Sections 301–325)
- Building energy efficiency (Sections 411–441)

This federal legislation (the RFS) requires ever-increasing levels of renewable fuels to replace petroleum (EPA 2022). The EPA is responsible for developing and implementing regulations to ensure that transportation fuel sold in the United States contains a minimum volume of renewable fuel. RFS program regulations were developed in collaboration with refiners, renewable fuel producers, and many other stakeholders.

The RFS program was created under the Energy Policy Act of 2005 and established the first renewable fuel volume mandate in the United States. As required under the act, the original RFS program (RFS1) required 7.5 billion gallons of renewable fuel to be blended into gasoline by 2012. Under the EISA, the RFS program was expanded in several key ways that laid the foundation for achieving significant reductions of GHG emissions through the use of renewable fuels, for reducing imported petroleum, and for encouraging the development and expansion of our nation's renewable fuels sector. The updated program ("RFS2") includes the following:

- EISA expanded the RFS program to include diesel, in addition to gasoline.
- EISA increased the volume of renewable fuel required to be blended into transportation fuel from 9 billion gallons in 2008 to 36 billion gallons by 2022.
- EISA established new categories of renewable fuel and set separate volume requirements for each one.
- EISA required the EPA to apply life-cycle GHG performance threshold standards to ensure that each category of renewable fuel emits fewer GHGs than the petroleum fuel it replaces.

Additional provisions of the EISA address energy savings in government and public institutions, promoting research for alternative energy, additional research in carbon capture, international energy programs, and the creation of "green jobs."

Transportation Equity Act for the 21st Century

The Transportation Equity Act for the 21st Century was signed into law in 1998 and builds on the initiatives established in the 1991 Intermodal Surface Transportation Efficiency Act (ISTEA) legislation. The Transportation Equity Act authorizes highway, highway safety, transit, and other efficient surface transportation programs. The act continues the program structure established for highways and transit under ISTEA, such as flexibility in the use of funds, emphasis on measures to improve the environment, and focus on a strong planning process as the foundation of transportation decisions. The Transportation Equity Act also provides for investment in research and its application to maximize the performance of the transportation system through, for example, deployment of intelligent transportation systems to help improve operations and management of transportation systems and vehicle safety.

Infrastructure Investment and Jobs Act

The Infrastructure Investment and Jobs Act (Infrastructure Deal) was signed into law November 15, 2021. The legislation includes $39 billion of new investment to modernize transit, in addition to continuing the existing transit programs for 5 years as part of surface transportation reauthorization. The Infrastructure Deal would also invest $7.5 billion to build out a national network of EV chargers. The Infrastructure Deal would provide funding for deployment of EV chargers along highway corridors to facilitate long-distance travel and within communities to provide convenient charging where people live, work, and shop to support a goal of building a nationwide network of 500,000 EV chargers. This would accelerate the adoption of EVs, which would help reduce emissions and improve air quality. In addition, the Infrastructure Deal would include more than $65 billion of investments in clean

energy transmission including upgrading existing power infrastructure through expanding transmission lines to facilitate the expansion of renewables and clean energy.

The Inflation Reduction Act of 2022

The Inflation Reduction Act was signed into law by President Biden in August 2022. The act includes specific investment in energy and climate reform and is projected to reduce GHG emissions within the U.S. by 40% as compared to 2005 levels by 2030. The act allocates funds to boost renewable energy infrastructure (e.g., solar panels and wind turbines), includes tax credits for the purchase of EVs, and includes measures that will make homes more energy efficient. However, portions of the Inflation Reduction Act were rescinded in the One Big Beautiful Bill Act of 2025 (Public Law No 119-21).

Energy Policy and Conservation Act (Natural Gas Regulations)

The Energy Policy and Conservation Act, 42 USC Section 6297(c), expressly preempts State and local regulations concerning the energy use of many natural gas appliances. (*California Restaurant Association v. City of Berkeley* (2023) 65 F.4th 1045.) The LVSP does not promote or incentivize natural gas. However, it is legally infeasible for the County to prohibit natural gas consumption.

4.2.2 State Regulations

Warren–Alquist Act

The California Legislature passed the Warren–Alquist Act in 1974, which created the CEC. The legislation also incorporated the following three key provisions designed to address the demand side of the energy equation:

- It directed CEC to formulate and adopt the nation's first energy conservation standards for both buildings constructed and appliances sold in California.
- The act removed the responsibility of electricity demand forecasting from the utilities, which had a financial interest in high-demand projections, and transferred it to a more impartial CEC.
- CEC was directed to embark on an ambitious research and development program, with a particular focus on fostering what were characterized as nonconventional energy sources.

State of California Energy Action Plan

CEC and CPUC approved the first State of California Energy Action Plan in 2003. The plan established shared goals and specific actions to ensure the provision of adequate, reliable, and reasonably priced electrical power and natural gas supplies; it also identified cost-effective and environmentally sound energy policies, strategies, and actions for California's consumers and taxpayers. In 2005, CEC and CPUC adopted a second Energy Action Plan to reflect various policy changes and actions of the prior 2 years.

At the beginning of 2008, CEC and CPUC determined that it was not necessary or productive to prepare a new Energy Action Plan. This determination was based, in part, on a finding that the state's energy policies have been significantly influenced by the passage of AB 32, the California Global Warming Solutions Act of 2006 (discussed below). Rather than produce a new Energy Action Plan, CEC and CPUC prepared an "update" that examines the state's ongoing actions in the context of global climate change.

Construction Equipment Fuel Efficiency

EPA sets emission standards for construction equipment. The first federal standards (Tier 1) were adopted in 1994 for all off-road engines over 50 horsepower and were phased in by 2000. A new standard was adopted in 1998 that introduced Tier 1 for all equipment below 50 horsepower and established the Tier 2 and Tier 3 standards. The Tier 2 and Tier 3 standards were phased in by 2008 for all equipment. The current iteration of emissions standards for construction equipment are the Tier 4 efficiency requirements are contained in 40 Code of Federal Regulations Parts 1039, 1065, and 1068 (originally adopted in 69 Federal Register 38958 [June 29, 2004], and most recently updated in 2014 [79 Federal Register 46356]). Emissions requirements for new off-road Tier 4 vehicles were completely phased in by the end of 2015.

CARB is also charged with developing air pollution control regulations based upon the best available control measures and implementing every feasible control measure under the state and federal Clean Air Act (Health and Safety Code Sections 39602.5, 39667, 43013, subds. [a] and [h], 43018, 40600, 40601, 40612 [a][2] and [c][1][A]). Pursuant to these directives, stringent emission standards were adopted in 2004 for off-road construction equipment (i.e., Tier 4 standards) (40 Code of Federal Regulations Parts 1039, 1065, and 1068; 13 CCR Section 2025; AR 2854). CARB also adopted emission standards for on-road heavy-duty diesel vehicles (i.e., haul trucks). (13 CCR Section 1956.8.) These haul truck regulations mandate fleet turnover to ensure that by January 1, 2023, nearly all on-road diesel trucks will have 2010 model year engines or equivalent [i.e., Tier 4]. In addition, interim steps are incorporated into the regulations (e.g., vehicles older than 1999 will be replaced with newer engines by 2020).

Assembly Bill 1007

AB 1007 (2005) required CEC to prepare a statewide plan to increase the use of alternative fuels in California (State Alternative Fuels Plan). CEC prepared the plan in partnership with CARB and in consultation with other state agencies, plus federal and local agencies. The State Alternative Fuels Plan assessed various alternative fuels and developed fuel portfolios to meet California's goals to reduce petroleum consumption, increase alternative fuels use, reduce GHG emissions, and increase in-state production of biofuels without causing a significant degradation of public health and environmental quality.

Other Applicable Regulations

Other applicable regulations include the following, which are discussed in Section 3.2.3, State Regulations:

- California Building Standards (Title 24, CALGreen)
- AB 32, SB 32, AB 1279 (the state's GHG emission reduction planning framework creates co-benefits for energy-related resources)
- SB 1078, SB 107, SB 350, SB 100, SB 1020 (Renewable Energy Sources)
- SB 1368
- AB 1493 and EO B-16-12
- EO S-1-07
- SB 375

- Advanced Clean Cars Program
- Advanced Clean Trucks Program
  - Truck and Bus Regulation, On-Road Heavy-Duty Diesel Vehicles (In-use) Regulation

4.2.3 Local Regulations

4.2.3.1 County of Imperial

Southern California Association of Governments

As noted above, California's 18 MPOs have been tasked with creating SCSs in an effort to reduce the region's VMT to help meet AB 32 targets through integrated transportation, land use, housing, and environmental planning. Pursuant to SB 375, CARB set per capita GHG emission reduction targets from passenger vehicles for each of the state's 18 MPOs. For SCAG, the state's initial mandated reductions were set at 8% by 2020 and 13% by 2035. In March 2018, CARB updated the SB 375 targets for SCAG to require 8% reduction by 2020 and a 19% reduction by 2035 in per capita passenger vehicle GHG emissions.

Pursuant to Government Code Section 65080(b)(2)(B), the SCS must "set forth forecasted development pattern for the region which when integrated with the transportation network, and other transportation measures and policies, will reduce the GHG emissions from automobiles and light trucks to achieve the GHG reduction targets." To that end, SCAG has developed Connect SoCal, the 2024–2050 RTP/SCS, which complies with CARB's updated emissions reduction targets and meets the requirements of SB 375 by achieving per capita GHG emission reductions relative to 2005 of 8% by 2020 and 19% by 2035 (SCAG 2024). The 2024–2050 RTP/SCS is a long-range visioning plan that balances future mobility and housing needs with economic, environmental, and public health goals, and charts a path toward a more mobile, sustainable, and prosperous region by making connections between transportation networks, between planning strategies, and between the people whose collaboration can improve the quality of life for Southern Californians. Connect SoCal embodies a collective vision for the region's future and is developed with input from local governments, county transportation commissions, tribal governments, nonprofit organizations, businesses, and local stakeholders within the counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura.

The 2024–2050 RTP/SCS states goals (1) Mobility: Build and maintain a robust transportation network; (2) Communities: Develop, connect and sustain communities that are livable and thriving; (3) Environment: Create a healthy region for the people of today and tomorrow; and (4) Economy: support a sustainable, efficient, and productive regional economic environment that provides opportunities for all residents. The RTP acknowledges that "New and emerging technologies have had a significant impact on the transportation sector, transforming various aspects of mobility, efficiency, safety and user experience. These technologies include advancements in vehicle technology, like electric vehicles" and "how zero-emission vehicles can strengthen resilience through vehicle-to-grid technologies or other opportunities where batteries can be used to enhance capacity of renewable energy sources." The "Plan also strives to achieve broader regional objectives, such as increased housing production, improved equity and resilience, the preservation of natural lands, improvement of public health, increased transportation safety, support for the region's vital goods movement industries and more efficient use of resources."

SCAG also adopted Resolution No. 23-653-1, which emphasizes the need for projects and strategies that ensure a safe, resilient, and efficient supply chain and goods movement system. The resolution also highlights that, due to

the volume of trade in the SCAG region, which is home to the largest port complex in the country, the SCAG [must] develop strategies to accommodate growing freight movement" (SCAG 2023).

Imperial County General Plan

The Renewable Energy and Transmission Element of the City's General Plan works to implement development policies for geothermal and other renewable energy land uses in Imperial County. The relevant goals and policies from the Energy and Transmission Element are the following:

Goal 1: Support the safe and orderly development of renewable energy while providing for the protection of environmental resources.

Objective 1.5: Require appropriate mitigation and monitoring for environmental issues associated with developing renewable energy facilities. Draft Renewable Energy and Transmission Element Page 25 (Revised October 6, 2015)

Objective 1.6: Encourage the efficient use of water resources required in the operation of renewable energy generation facilities.

Objective 1.7: Assure that development of renewable energy facilities and transmission lines comply with Imperial County Air Pollution Control District's regulations and mitigation measures

Goal 3: Support development of renewable energy resources that will contribute to and enhance the economic vitality of Imperial County.

Objective 1.5: Require appropriate mitigation and monitoring for environmental issues associated with developing renewable energy facilities. Draft Renewable Energy and Transmission Element Page 25 (Revised October 6, 2015)

Objective 1.6: Encourage the efficient use of water resources required in the operation of renewable energy generation facilities. Objective 1.7: Assure that development of renewable energy facilities and transmission lines comply with Imperial County Air Pollution Control District's regulations and mitigation measures

Goal 4: Support development of renewable energy resources that will contribute to the restoration efforts of the Salton Sea.

Objective 4.1: Prioritize the Salton Sea exposed seabed (playa) for renewable energy development.

Goal 5: Encourage development of innovative renewable energy technologies that will diversify Imperial County's energy portfolio.

Objective 5.1: Support the implementation of pilot projects intended to test or demonstrate new and innovative renewable energy production technologies.

Objective 5.2: Encourage development of utility-scale distributed generation projects in the County.

Imperial County Regional Climate Action Plan

Adopted in June 2021, the ICRCAP serves both the ICTC and SCAG to address climate change and guide the regional efforts to reduce GHG emissions. The ICRCAP includes both emissions inventories for various jurisdictions in the Imperial Valley and identifies energy-related measures that would be implemented at the regional level to address GHG emissions and climate change, and therefore, energy. See Section 3.3.3.1 for a detailed discussion on the ICRCAP.

4.3 Significance Criteria and Methodology

4.3.1 Thresholds of Significance

The significance criteria used to evaluate the project impacts to energy are based on Appendix G of the CEQA Guidelines. According to CEQA Guidelines Appendix G, a significant impact related to energy would occur if the project would:

1. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation.

The project's potential to conflict with or obstruct a state or local plan for renewable energy or energy efficiency is analyzed in Section 2.4 and Section 3.5 and is therefore not analyzed herein.

4.3.2 Approach and Methodology

LVSP Measures

The LVSP would implement policies, programs, and existing regulations that reduce criteria air pollutant emissions, GHG emissions, and VMT, thereby achieving direct or indirect energy co-benefits. See Section 4.3, Air Quality; Section 4.8, Greenhouse Gas Emissions; and Section 4.17, Transportation, for the full list of policies, programs, and existing regulations. The following policies and existing regulations are relevant to the project's energy analysis:

- **Program HP-7:** Use of Tier 4 Final Off-Road Equipment for Construction and Operations
- **Policy CT-19:** Increased Bus Frequencies
- **Policy CT-20:** Dedicated Bus Lane on SR-111
- **Policy CT-21** Transit Hubs
- **Policy CT-22:** Express Bus Connections
- **Policy CT-23:** Employee Shuttle
- **Policy CT-24:** Construction Traffic Management Plan

4.3.2.1 Construction Energy

Construction of the LVSP would result in energy consumption primarily associated with the use of off-road construction equipment, on-site hauling and vendor (material delivery) trucks, and worker vehicles. All details for construction criteria air pollutants discussed in the Construction Scenario Assumptions subsection are also applicable for the estimation of construction-related energy consumption. As such, see he Construction Scenario Assumptions subsection for a

discussion of construction calculation methodology and assumptions used in the energy analysis. In addition, the following methodology was used to estimate construction electricity and petroleum consumption.

Electricity

Although electrical service would be established to serve construction, the amount of electricity that would be used is likely to be small relative to the operational demand of the project. Over the course of construction of the LVSP, the amount of electrical off-road equipment is anticipated to increase; however, to provide a conservative estimate of GHG and pollutant emissions, off-road equipment was largely assumed to be diesel powered. Temporary electric power for as-necessary lighting and electronic equipment, such as computers inside temporary construction trailers, would be provided by IID.

Natural Gas

Natural gas is not anticipated to be required during construction of the LVSP. Fuels used for construction would primarily consist of diesel and gasoline, which are discussed below under the Petroleum subsection.

Petroleum

Potential LVSP construction petroleum consumption was assessed through projected vehicle trip generation and off-road equipment used, as provided by the CalEEMod and CARB EMFAC2021 outputs in the criteria air pollutant and GHG emissions calculations (Appendix A). Fuel consumption from construction equipment was estimated by converting the total CO_2 emissions from each construction phase to gallons using conversion factors for CO_2 to gallons of gasoline or diesel. The conversion factor for gasoline is 8.78 kilograms per MT of CO_2 per gallon, and the conversion factor for diesel is 10.21 kilograms per MT of CO_2 per gallon (The Climate Registry 2025). Heavy-duty construction equipment associated with construction activities and vendor trucks was assumed to use diesel fuel. It was assumed that construction workers would travel to and from the project's construction sites in gasoline-powered vehicles. Fuel consumption from worker and vendor trips was estimated by converting the total CO_2 emissions from the construction phase to gallons using the conversion factors for CO_2 to gallons of gasoline or diesel.

4.3.2.2 Operational Energy

Energy consumption related to LVSP operations would include electricity use for building operations, water demand, wastewater treatment, and off-road equipment; natural gas consumption for heating; and petroleum consumption for stationary sources, motor vehicle travel, and rail travel. As previously discussed, three operational scenarios were modeled, consistent with land use development buildout information. Total buildout of the LVSP was assumed to be in 2055, with interim operational scenario years 2035 and 2045 also assessed. Operational energy consumption is based on the operational GHG emission calculations found in Appendix B. All details for construction criteria air pollutants discussed in the Operational Emission Source Assumptions subsection are also applicable for the estimation of construction-related energy consumption. As such, see Operational Emission Source Assumptions for a discussion of operational calculations methodology and assumptions used in the energy analysis.

Electricity and Natural Gas

Operation of the LVSP would require electricity for multiple purposes, including, but not limited to, building heating, cooling, lighting; and appliances, including refrigeration, electronics, including EV charging, equipment, and

machinery. Electricity would also be consumed during operation of the project related to water usage and solid waste disposal.

The estimation of operational electricity and natural gas consumption was based on CalEEMod land use defaults and units or total area (i.e., square footage) of the LVSP land uses. The electricity and natural gas use from residential land uses is calculated in CalEEMod based on the Residential Appliance Saturation Study. For nonresidential buildings, CalEEMod energy intensity value (electricity or natural gas usage per square foot per year) assumptions were based on the California Commercial End-Use Survey database. In addition, the energy associated with parking lots for each land use was assumed to be fully electric, with no natural gas usage, using CalEEMod defaults. It was assumed that certain land uses would use alternative electricity and natural gas assumptions, as described in the Operational Emission Source Assumptions subsection.

Petroleum

Petroleum would be consumed by vehicles throughout the Plan Area for LVSP operations. Such consumption is a function of total VMT and estimated vehicle fuel economies for the vehicles traveling within the Plan Area. With respect to estimated VMT from CalEEMod and based on the trip frequency and trip length methodologies cited in Section 2.3.2.2, Phase 1 would generate an estimated 523,719,580 annual VMT in 2035, Phase 2 would generate an estimated 943,402,054 annual VMT in 2045, and buildout of the LVSP would generate an estimated 1,139,911,995 annual VMT.

Similar to construction worker and vendor trips, fuel consumption was estimated by converting the total CO_2 emissions from mobile sources to gallons using the conversion factors for CO_2 to gallons of gasoline or diesel. Based on the annual fleet mix provided in CT-EMFAC2021 for Imperial County, for Phase 1, approximately 84% of the fleet mix was assumed to run on gasoline, and approximately 16% of the fleet mix was assumed to use diesel. For Phase 2, approximately 80% of the fleet mix was assumed to run on gasoline, and approximately 20% of the fleet mix was assumed to use diesel. For buildout of the LVSP, approximately 77% of the fleet mix was assumed to run on gasoline, and approximately 23% of the fleet mix was assumed to use diesel. Although a portion of vehicles accessing the site are anticipated to be plug-in hybrid EVs or battery EVs, all vehicles were conservatively assumed to consume petroleum for the energy analysis

In addition, petroleum, specifically diesel, would be consumed by LVSP-generated rail transport and stationary sources, such as emergency generators and fire pumps. Fuel consumption from rail line haul and stationary sources was estimated by converting the total CO_2 emissions from project rail and stationary sources to gallons using the conversion factor for diesel.

Renewable Energy Potential

Implementation of the LVSP would include the development of commercial-scale renewable-energy-generating facilities, such as PV solar power systems installed at traditional solar field sites, integrated with agriculture operations (agrivoltaics), and deployed on bodies of water (floatovoltaics). The total amount of potential renewable energy from solar uses was calculated based on an average estimated number of 6 acres per MW generated per facility, operating 8,760 hours per year.

Furthermore, implementation of the LVSP would include the development of 17 geothermal power generating facilities at buildout. In calculating the potential geothermal energy production, it was assumed that each facility would have a capacity of 150 MW and would be operational 8,760 hours per year.

Lastly, solar power generation would be incorporated into the project sites through the installation of rooftop solar panels on residential and nonresidential buildings, as discussed above under California Code of Regulations, Title 24, Part 6. However, due to the absence of detailed information regarding specific building locations and available rooftop area, the potential electricity generation from rooftop solar installations was not quantified in the energy analysis.

4.4 Impacts Analysis

4.4.1 Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during Project construction or operation?

The development facilitated by the LVSP's consumption of energy resources during construction and operation is evaluated in detail below.

Construction

Electricity

During construction, as-necessary lighting, the conveyance of water used to control fugitive dust, and electronic equipment, such as computers inside temporary construction trailers, would require electricity to be provided by IID. The electricity demand at any given time would vary throughout the construction period based on the construction activities being performed and would cease upon completion of construction. When not in use, electrical equipment would be powered off so as to avoid unnecessary energy consumption. The electricity used for project construction activities would be temporary and minimal. The minimal construction electricity needs would be within the supply and infrastructure service capabilities of IID, and it would not require additional capacity. Furthermore, construction of the project would not impact energy resources.

Natural Gas

Construction activities typically do not involve the consumption of natural gas. Accordingly, natural gas would not be expected to be supplied to support project construction activities. Natural gas is not anticipated to be required during construction of the LVSP. Fuels used for construction would primarily consist of diesel and gasoline, which are discussed under the subsection Petroleum, below. Any minor amounts of natural gas that may be consumed as a result of LVSP construction would be temporary and negligible and would not have an adverse effect.

Petroleum

The project would consume petroleum during construction associated with the use of off-road equipment and vehicles (worker vehicles, delivery trucks, and haul trucks). The estimated diesel fuel usage from construction is shown in Table 4-1. See Energy Calculations in Appendix F, Operational Health Risk Assessment, for details.

Table 4-1. Total Construction Petroleum Demand

Construction Phase	Off-Road Equipment (diesel)	Haul Trucks (diesel)	Vendor Trucks (diesel)	Worker Vehicles (gasoline)	Total
Gallons					
Phase 1 (2025–2034)	28,533,408	1,017,890	8,605,796	14,722,386	52,879,480
Phase 2 (2035–2044)	8,627,559	386,192	3,624,729	6,201,543	18,840,024
Phase 3 (2045–2054)	7,572,068	252,388	2,983,646	5,095,276	15,903,377
				Total	**87,622,881**

Source: Appendix F, Energy Calculations.

In summary, construction associated with the development of the LVSP is estimated to consume a total of approximately 61,603,676 gallons of diesel and 26,019,205 gallons of gasoline, for a total of 87,622,881 gallons of petroleum. Construction as implemented by the LVSP would include individual construction projects, each of which would represent single events and would not require the ongoing or permanent commitment of petroleum resource for this purpose.[27]

Notably, the construction activity associated with the development of the LVSP would be subject to CARB's In-Use Off-Road Diesel Vehicle Regulation, which applies to certain off-road diesel engines, vehicles, or equipment greater than 25 horsepower. The regulation (1) imposes limits on idling, requires a written idling policy, and requires a disclosure when selling vehicles; (2) requires all vehicles to be reported to CARB (using the Diesel Off-Road Online Reporting System) and labeled; (3) restricts the adding of older vehicles into fleets starting on January 1, 2014; and (4) requires fleets to reduce their emissions by retiring, replacing, or repowering older engines or by installing verified diesel emission control strategies (i.e., exhaust retrofits). The fleet must either show that its fleet average index was less than or equal to the calculated fleet average target rate or that the fleet has met the Best Achievable Control Technology requirements.

Overall, given the temporary nature of the fuel demand, the relatively small proportion of total state consumption involved, and the adherence to efficient and regulated construction methods, the LVSP's petroleum use would not

[27] When considered collectively over the 30-year construction period, petroleum consumption from these activities would amount to approximately 0.33% of California's total petroleum use in 2022, the most recent year for which data is available. In that year, the state consumed approximately 26.4 billion gallons of petroleum (EIA 2024b).

be considered wasteful or inefficient. Therefore, the impact of petroleum consumption associated with construction activities under the LVSP would be **less than significant.**

Operation

Electricity

LVSP operations would require electricity for multiple purposes including, but not limited to, building heating, ventilation, and air conditioning; lighting; appliances; electronics; and off-road equipment. Additionally, the supply, conveyance, treatment, and distribution of water would indirectly result in electricity usage. The LVSP's electricity usage was based on default CalEEMod values and supplemented with project-specific data for land uses without default values available. Default electricity generation consumption in CalEEMod was based on default values for the land uses identified in CalEEMod to represent LVSP buildout. Table 4-2 shows the estimated annual operational electricity demand for each interim operational phase and buildout.

Table 4-2. Annual Operational Electricity Demand Summary

Operational Year	Electricity Demand (kilowatt-hours/year)
Phase 1 (2035)	4,627,886,007
Phase 2 (2045)	5,834,810,398
Buildout (2055)	7,701,759,506

Source: Appendix F, Energy Calculations.

As shown in Table 4-2, the LVSP is anticipated to consume approximately 4.6 billion kWh (4.6 million MWh) of electricity per year in the interim operational year of 2035, 5.8 billion kWh (5.8 million MWh) of electricity per year in the interim operational year of 2045, and 7.6 billion kWh (7.6 million MWh) of electricity per year in the buildout year of 2055.

The LVSP proposes conventional industrial uses reflecting contemporary energy-efficient/energy-conserving designs and operational programs. Future development projects part of the LVSP would not be inherently energy intensive, and the LVSP's electricity demands for each land use at buildout would be comparable to other projects of similar scale and configuration. The developments facilitated by LVSP would be required to comply with the applicable Title 24 standards, which would ensure that electricity demand would not be inefficient, wasteful, or otherwise unnecessary.

Due to the high investment costs to construct transmission lines, transmission lines owned and operated by IID are constructed to support development at the time of construction. The electrical transmission network for the Plan Area would include collector lines, or generator tie lines, which would carry electricity from generation projects (solar, geothermal, etc.) to the first and nearest substation located outside the Plan Area. Additionally, the LVSP would support the development of electrical substations and BESS projects to support the growth of energy production and energy demand in the Plan Area. Based on these considerations, electricity demand is anticipated to be accommodated within the IID load forecasting, which generally increases over time, and would not require additional capacity during peak periods. Therefore, IID has the supply and capacity to accommodate the LVSP.

Furthermore, as part of the LVSP's design process, the County considered how the LVSP could increase its reliance on renewable energy sources to meet its energy demand. The LVSP would include the development of renewable

energy sources--geothermal facilities, commercial-scale PV fields, agrivoltaics solar fields (PV systems integrated into agricultural operations), and floatovoltaic solar fields floatovoltaics (PV systems installed on bodies of water). Additionally, the LVSP would support the development of electrical substations and BESS projects to support the growth of energy production, as well as energy demand, in the Plan Area. Solar power generation would also be incorporated into the project sites through the installation of rooftop solar panels on residential and nonresidential buildings as discussed above under California Code of Regulations.

During Phases 1 and 2, approximately 1,500 acres and 1,680 acres, respectively, are anticipated to be developed for solar energy production, with an estimated annual generation of 1.9 million MWh in Phase 1 and 2.1 million MWh in Phase 2. Given the typical lifespan of solar power systems—approximately 30 years—many of these systems are expected to be decommissioned prior to full buildout of the Specific Plan area. As a result, only about 502 acres of solar power generation systems would remain operational at buildout, producing an estimated 1.89 million kWh per year.

Additionally, the LVSP would support the development of geothermal facilities, an energy source that would capitalize on the geography of the Plan Area. The LVSP would include the development of 11 geothermal facilities during Phase 1, an additional 4 facilities during Phase 2, and an additional 2 facilities during Phase 3. At buildout, a total of 17 geothermal facilities would be operational, generating approximately 22.34 million MWh of renewable energy per year. At buildout, the total renewable energy potential of the LVSP would be approximately 22.53 million MWh per year, with most of the capacity sourced from geothermal facilities.

Furthermore, the LVSP would include the development of lithium extraction and processing infrastructure and lithium battery manufacturing facilities to support the growing demand for lithium-ion batteries for use in EVs, BESS facilities, and other advanced technologies. At full buildout, approximately 4,630 acres of lithium extraction and processing infrastructure and 3,445 acres of lithium battery production facilities would be operational. Based on the County's estimates, lithium infrastructure at proposed full buildout would produce approximately 450,800 metric tons of lithium per year; for context, this amount of lithium could support the manufacture of approximately 16 million 60-kWh lithium-ion batteries.

The LVSP's integration of renewable energy technologies, in combination with BESS facilities, would help reduce regional electricity demand from carbon-intensive sources by supplying the regional grid with more renewably sourced energy, particularly during peak periods. This approach is increasingly supported by Title 24 standards, which encourage load shifting and improved energy efficiency through the use of energy storage. By storing excess renewable generation during off-peak hours and discharging it when demand is highest, BESS facilities would maximize the potential for the renewable electricity generated by the LVSP to be used to meet regional demand.

Natural Gas

Proposed development (e.g., industrial, commercial, and residential) within the Plan Area is anticipated to use natural gas for building operations. Table 4-3 shows the estimated annual operational natural gas demand for each interim operational phase and buildout.

Table 4-3. Annual Operational Natural Gas Demand Summary

Operational Year	Natural Gas Demand (kBTU/year)
Phase 1 (2035)	341,407,831

Table 4-3. Annual Operational Natural Gas Demand Summary

Operational Year	Natural Gas Demand (kBTU/year)
Phase 2 (2045)	575,567,364
Buildout (2055)	664,727,364

Source: Appendix F, Energy Calculations.
Note: kBTU = thousand British thermal units.

As shown in Table 4-3, the LVSP is anticipated to consume approximately 341,000 kBTU of natural gas per year in the interim operational year of 2035, 576,000 kBTU of natural gas per year in the interim operational year of 2045, and 665,000 kBTU of natural gas per year in the buildout operational year of 2055.

The LVSP proposes conventional industrial uses reflecting contemporary energy-efficient/energy-conserving designs and operational programs. Future development projects part of the LVSP would not be inherently energy intensive, and the LVSP's natural gas demands for each land use would be comparable to other projects of similar scale and configuration.

Natural gas infrastructure within the Plan Area would support the LVSP's natural gas demand. A north/south-trending transmission line is present east of the Plan Area, with an east/west-trending high-pressure distribution line within the Plan Area along West Hoober Road. Two other high-pressure distribution lines are located off the north–south transmission line, including one line east of Niland and another line located south of the Plan Area, from Rockwood to Westmorland. Natural gas can be reformed to produce hydrogen, which would be produced within the Plan Area. New and/or upgraded natural gas facilities would require installation of gas mains and gas laterals.

As noted above, the development facilitated by LVSP is anticipated to consume approximately 664,727,364 kBTU of natural gas per year at buildout, which would be less than the forecasted demand for the entire SoCalGas service area in 2040. The LVSP would account for approximately 0.05% of SoCalGas's total natural gas capacity in 2040. As such, because the LVSP is expected to be built out in 2055, demand is anticipated to be accommodated within the SoCalGas load forecasting, which generally increases over time, and would not require additional capacity during peak periods. Therefore, SoCalGas has the supply and capacity to accommodate the LVSP. Furthermore, the LVSP buidlout would be required to comply with the applicable Title 24 standards, which would further ensure that the LVSP's natural gas demands would not be inefficient, wasteful, or otherwise unnecessary.

Petroleum

During operations, fuel consumption resulting from the LVSP would involve the use of motor vehicles traveling to and from and within the Plan Area, stationary equipment, and line haul rail travel.

Fuel demand estimates for the LVSP at buildout are provided in Table 4-4.

Table 4-4. Annual Operational Fuel Demand Summary

Construction Phase	Vehicles (gasoline)	Vehicles (diesel)	Off-Road Equipment (diesel)	Stationary Equipment (diesel)	Rail (diesel)	Total
	Gallons					
Phase 1 (2035)	15,810,974	2,551,364	8,467,800	2,368,726	361,783	29,560,647
Phase 2 (2045)	25,183,869	5,448,043	17,607,689	2,818,336	449,283	51,507,219
Buildout (2055)	29,270,253	7,476,122	18,630,185	3,741,246	646,115	59,763,920

Source: Appendix F, Energy Calculations.

As summarized in Table 4-4, the LVSP at buildout in 2055 would result in an estimated annual fuel demand of 59,763,920 gallons of petroleum. Fuel would be provided by current and future commercial vendors.

As discussed above, automobile fuel economy is set under the Clean Air Act. California is currently litigating its ability to set ongoing fuel economy standards. However, it is legally infeasible for the County to set its own standards. 42 USC Section 7543(a) states, "No state or any political subdivision therefore shall adopt or attempt to enforce any standard relating to the control of emissions from new motor vehicles or new motor vehicle engines subject to this part." Over the lifetime of the LVSP, the fuel efficiency of the vehicles being used by the residents, visitors, and employees of the LVSP is expected to increase. Enhanced fuel economies realized pursuant to federal and state regulatory actions and related transition of vehicles to alternative energy sources (e.g., electricity, biofuels, hydrogen cells) would likely decrease future gasoline fuel demands.

As described in the LVSP, the project would implement policies that would improve transportation and circulation that would reduce fuel demand in the long term (see Section 4.3.2, Approach and Methodology). Chapter 5 of the LVSP includes circulation and transportation policies 19 through 24, which would be implemented in the LVSP to enhance transit access and connectivity of the project within the County. Specifically, these policies would allow for the development of a public transportation hub where multiple modes of transportation converge and which is designed to facilitate seamless transfers, improve accessibility, and reduce travel time for commuters. Although the County cannot mandate carpooling under state law, LVSP Policy CT-13 promotes carpooling to further reduce trips.[28] In addition, the project would implement sidewalks and trails along rivers, facilitating and encouraging pedestrian access. The project would promote the use of bicycles as an alternative means of transportation by providing short-term and/or long-term bicycle parking accommodations and by designing bike routes to connect to commercial nodes and transportation hubs in the local area.

The County would support the diversification of travel modes used in Lithium Valley to increase employee trips made by bicycle or public transit, including new mobility types like electric shuttles, electric vanpool/carpool, electric carsharing service, docked bikeshare, and e-scooter share. The County would consult with employers in or near the Plan Area to create a shuttle system connecting to and from employment centers, nearby transit hubs, and commercial destinations. Finally, the LVSP would allow for the development of EV charging stations to promote EV

[28] It is legally infeasible to mandate ridesharing (e.g. vanpool, carpool). See California Health and Safety Code Sections 40454, 40716, 40717.5, and 40717.9; and *Merced Alliance for Responsible Growth v. City of Merced* (2012 Case No. F062602) 2012 WL 5984917.

use in the area. Facilitating public transit, bicycle, shuttle, carpooling, and EV charging access for employees would reduce VMT and associated energy consumption.

The geographic context for impacts to petroleum is statewide; therefore, petroleum-based fuel usage caused by the project would not likely have a significant effect on local and regional energy supplies or require additional capacity.

Trip generation and VMT generated by the LVSP are consistent with Specific Plans of similar scale and configuration. That is, the LVSP does not propose uses or operations that would inherently result in excessive and wasteful vehicle trips and VMT or associated excess and wasteful vehicle energy consumption. As supported by the preceding discussions, project transportation energy consumption would not be considered inefficient, wasteful, or otherwise unnecessary.

Summary

As explained above, although the project would increase energy consumption during construction and operation, the project would allow for the development of renewable energy sources and would not result in wasteful, inefficient, or unnecessary consumption of energy resources, including electricity, natural gas, or petroleum, during project construction or operation. Impacts would be **less than significant**.

Level of Significance Before Mitigation

Impacts would be **less than significant**.

Mitigation Measures

No mitigation is required.

Level of Significance After Mitigation

Impacts would be **less than significant** without mitigation.

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Appendix A
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7.2. Healthy Places Index Scores

7.3. Overall Health & Equity Scores

7.4. Health & Equity Measures

7.5. Evaluation Scorecard

7.6. Health & Equity Custom Measures

8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Lithium Valley SP Construction - Phase 1 (2025-2029)
Construction Start Date	1/1/2025
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	4.80
Location	33.18829759139308, -115.6026869228474
County	Imperial
City	Unincorporated
Air District	Imperial County APCD
Air Basin	Salton Sea
TAZ	5600
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
General Heavy Industry	25.0	1000sqft	0.57	25,000	2,500	—	—	—

General Office Building	266	1000sqft	6.12	266,397	26,659	—	—	—
General Heavy Industry	756	1000sqft	17.3	755,681	75,568	—	—	—
General Heavy Industry	9,923	1000sqft	228	7,541,382	754,154	—	—	—
Manufacturing	1,498	1000sqft	34.4	1,498,069	149,803	—	—	—
Manufacturing	2,273	1000sqft	52.2	2,272,527	227,253	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	221	212	243	1,613	1.74	3.39	126,251	126,254	3.39	12,624	12,628	—	320,287	320,287	10.5	16.2	652	326,028
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	206	201	262	1,215	1.74	3.39	126,251	126,254	3.39	12,624	12,628	—	301,664	301,664	10.8	16.2	16.9	306,779
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	152	146	184	964	1.25	2.43	89,238	89,241	2.43	8,924	8,926	—	220,913	220,913	7.47	11.6	201	224,749
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	27.7	26.6	33.5	176	0.23	0.44	16,286	16,286	0.44	1,629	1,629	—	36,575	36,575	1.24	1.92	33.3	37,210

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	221	212	243	1,613	1.74	3.39	126,251	126,254	3.39	12,624	12,628	—	320,287	320,287	10.5	16.2	652	326,028
2026	214	209	235	1,537	1.74	3.39	126,251	126,254	3.39	12,624	12,628	—	316,404	316,404	10.3	16.2	591	322,073
2027	211	207	228	1,456	1.74	3.39	126,251	126,254	3.39	12,624	12,628	—	312,672	312,672	10.3	16.1	530	318,263
2028	208	201	221	1,398	1.69	3.39	126,251	126,254	3.39	12,624	12,628	—	308,482	308,482	10.1	15.5	472	313,818
2029	203	198	214	1,340	1.69	3.39	126,251	126,254	3.39	12,624	12,628	—	304,207	304,207	10.1	15.4	419	309,481
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	206	201	262	1,215	1.74	3.39	126,251	126,254	3.39	12,624	12,628	—	301,664	301,664	10.8	16.2	16.9	306,779
2026	204	199	251	1,170	1.74	3.39	126,251	126,254	3.39	12,624	12,628	—	298,187	298,187	10.6	16.2	15.3	303,290
2027	198	194	243	1,120	1.74	3.39	126,251	126,254	3.39	12,624	12,628	—	294,818	294,818	10.6	16.2	13.7	299,919
2028	196	192	235	1,087	1.74	3.39	126,251	126,254	3.39	12,624	12,628	—	291,002	291,002	7.22	15.5	12.3	295,822
2029	195	190	225	1,054	1.69	3.39	126,251	126,254	3.39	12,624	12,628	—	287,099	287,099	7.05	15.3	10.8	291,855
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	152	146	184	964	1.25	2.42	88,994	88,997	2.42	8,899	8,902	—	220,913	220,913	7.47	11.6	201	224,749
2026	148	144	178	926	1.25	2.42	88,994	88,997	2.42	8,899	8,902	—	218,311	218,311	7.47	11.6	182	222,124
2027	146	143	170	882	1.25	2.42	88,994	88,997	2.42	8,899	8,902	—	215,801	215,801	7.35	11.4	164	219,543
2028	143	139	165	854	1.21	2.43	89,238	89,241	2.43	8,924	8,926	—	213,551	213,551	7.33	11.0	146	217,159
2029	141	137	159	824	1.21	2.42	88,994	88,997	2.42	8,899	8,902	—	210,071	210,071	4.91	10.9	129	213,575
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	27.7	26.6	33.5	176	0.23	0.44	16,241	16,242	0.44	1,624	1,625	—	36,575	36,575	1.24	1.92	33.3	37,210
2026	26.9	26.3	32.4	169	0.23	0.44	16,241	16,242	0.44	1,624	1,625	—	36,144	36,144	1.24	1.91	30.2	36,775
2027	26.7	26.0	31.0	161	0.23	0.44	16,241	16,242	0.44	1,624	1,625	—	35,728	35,728	1.22	1.89	27.1	36,348

2028	26.0	25.4	30.1	156	0.22	0.44	16,286	16,286	0.44	1,629	1,629	—	35,356	35,356	1.21	1.82	24.2	35,953
2029	25.7	25.1	29.0	150	0.22	0.44	16,241	16,242	0.44	1,624	1,625	—	34,780	34,780	0.81	1.81	21.4	35,360

3. Construction Emissions Details

3.1. Demolition (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.17	2.17	27.0	109	0.20	0.38	—	0.38	0.38	—	0.38	—	20,550	20,550	0.83	0.17	—	20,620
Demolition	—	—	—	—	—	—	0.03	0.03	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.17	2.17	27.0	109	0.20	0.38	—	0.38	0.38	—	0.38	—	20,550	20,550	0.83	0.17	—	20,620
Demolition	—	—	—	—	—	—	0.03	0.03	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	1.55	1.55	19.3	77.9	0.14	0.27	—	0.27	0.27	—	0.27	—	14,679	14,679	0.60	0.12	—	14,729
Demolition	—	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.28	0.28	3.52	14.2	0.03	0.05	—	0.05	0.05	—	0.05	—	2,430	2,430	0.10	0.02	—	2,439
Demolition	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.67	0.59	0.55	10.6	0.00	0.00	1,226	1,226	0.00	122	122	—	1,386	1,386	0.05	0.04	4.89	1,406
Vendor	0.04	0.03	0.84	0.39	0.01	0.01	180	180	0.01	18.0	18.0	—	755	755	0.01	0.10	2.08	788
Hauling	< 0.005	< 0.005	0.15	0.04	< 0.005	< 0.005	29.5	29.5	< 0.005	2.94	2.95	—	136	136	< 0.005	0.02	0.29	143
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.51	0.46	0.66	5.96	0.00	0.00	1,226	1,226	0.00	122	122	—	1,171	1,171	0.06	0.04	0.13	1,186
Vendor	0.04	0.03	0.93	0.40	0.01	0.01	180	180	0.01	18.0	18.0	—	756	756	0.01	0.10	0.05	787
Hauling	< 0.005	< 0.005	0.17	0.04	< 0.005	< 0.005	29.5	29.5	< 0.005	2.94	2.95	—	136	136	< 0.005	0.02	0.01	143
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.42	0.36	0.45	5.37	0.00	0.00	864	864	0.00	86.3	86.3	—	900	900	0.04	0.03	1.51	911
Vendor	0.03	0.02	0.65	0.28	< 0.005	0.01	127	127	0.01	12.7	12.7	—	540	540	0.01	0.07	0.64	562
Hauling	< 0.005	< 0.005	0.12	0.03	< 0.005	< 0.005	20.8	20.8	< 0.005	2.07	2.08	—	97.1	97.1	< 0.005	0.02	0.09	102

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.08	0.98	0.00	0.00	158	158	0.00	15.7	15.7	—	149	149	0.01	0.01	0.25	151
Vendor	0.01	< 0.005	0.12	0.05	< 0.005	< 0.005	23.2	23.2	< 0.005	2.32	2.32	—	89.4	89.4	< 0.005	0.01	0.11	93.1
Hauling	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	3.79	3.79	< 0.005	0.38	0.38	—	16.1	16.1	< 0.005	< 0.005	0.02	16.9

3.3. Demolition (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.17	2.17	27.0	109	0.20	0.38	—	0.38	0.38	—	0.38	—	20,560	20,560	0.83	0.17	—	20,630
Demolition	—	—	—	—	—	—	0.03	0.03	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.17	2.17	27.0	109	0.20	0.38	—	0.38	0.38	—	0.38	—	20,560	20,560	0.83	0.17	—	20,630
Demolition	—	—	—	—	—	—	0.03	0.03	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	1.55	1.55	19.3	77.9	0.14	0.27	—	0.27	0.27	—	0.27	—	14,685	14,685	0.60	0.12	—	14,736
Demolition	—	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.28	0.28	3.52	14.2	0.03	0.05	—	0.05	0.05	—	0.05	—	2,431	2,431	0.10	0.02	—	2,440
Demolition	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.60	0.55	0.51	9.73	0.00	0.00	1,226	1,226	0.00	122	122	—	1,360	1,360	0.05	0.04	4.46	1,379
Vendor	0.04	0.03	0.80	0.36	0.01	0.01	180	180	0.01	18.0	18.0	—	741	741	0.01	0.10	1.86	774
Hauling	< 0.005	< 0.005	0.15	0.04	< 0.005	< 0.005	29.5	29.5	< 0.005	2.94	2.95	—	133	133	< 0.005	0.02	0.28	140
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.48	0.44	0.59	5.48	0.00	0.00	1,226	1,226	0.00	122	122	—	1,149	1,149	0.06	0.04	0.12	1,164
Vendor	0.04	0.03	0.88	0.37	0.01	0.01	180	180	0.01	18.0	18.0	—	742	742	0.01	0.10	0.05	773
Hauling	< 0.005	< 0.005	0.16	0.04	< 0.005	< 0.005	29.5	29.5	< 0.005	2.94	2.95	—	133	133	< 0.005	0.02	0.01	139
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.37	0.34	0.42	4.96	0.00	0.00	864	864	0.00	86.3	86.3	—	882	882	0.04	0.03	1.38	894
Vendor	0.03	0.02	0.62	0.26	< 0.005	0.01	127	127	0.01	12.7	12.7	—	530	530	0.01	0.07	0.57	552
Hauling	< 0.005	< 0.005	0.11	0.03	< 0.005	< 0.005	20.8	20.8	< 0.005	2.08	2.08	—	95.0	95.0	< 0.005	0.01	0.09	99.6

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.08	0.91	0.00	0.00	158	158	0.00	15.7	15.7	—	146	146	0.01	0.01	0.23	148
Vendor	< 0.005	< 0.005	0.11	0.05	< 0.005	< 0.005	23.2	23.2	< 0.005	2.32	2.32	—	87.7	87.7	< 0.005	0.01	0.09	91.4
Hauling	< 0.005	< 0.005	0.02	< 0.005	< 0.005	< 0.005	3.79	3.79	< 0.005	0.38	0.38	—	15.7	15.7	< 0.005	< 0.005	0.01	16.5

3.5. Demolition (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.17	2.17	27.0	109	0.20	0.38	—	0.38	0.38	—	0.38	—	20,561	20,561	0.83	0.17	—	20,632
Demolition	—	—	—	—	—	—	0.03	0.03	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.17	2.17	27.0	109	0.20	0.38	—	0.38	0.38	—	0.38	—	20,561	20,561	0.83	0.17	—	20,632
Demolition	—	—	—	—	—	—	0.03	0.03	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	1.55	1.55	19.3	77.9	0.14	0.27	—	0.27	0.27	—	0.27	—	14,687	14,687	0.60	0.12	—	14,737
Demolition	—	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.28	0.28	3.52	14.2	0.03	0.05	—	0.05	0.05	—	0.05	—	2,432	2,432	0.10	0.02	—	2,440
Demolition	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.57	0.52	0.47	8.82	0.00	0.00	1,226	1,226	0.00	122	122	—	1,336	1,336	0.05	0.04	4.06	1,355
Vendor	0.04	0.03	0.77	0.34	0.01	0.01	180	180	0.01	18.0	18.0	—	726	726	0.01	0.10	1.62	758
Hauling	< 0.005	< 0.005	0.14	0.04	< 0.005	< 0.005	29.5	29.5	< 0.005	2.94	2.95	—	130	130	< 0.005	0.02	0.26	136
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.43	0.38	0.55	4.93	0.00	0.00	1,226	1,226	0.00	122	122	—	1,130	1,130	0.06	0.04	0.10	1,144
Vendor	0.03	0.03	0.84	0.34	0.01	0.01	180	180	0.01	18.0	18.0	—	727	727	0.01	0.10	0.04	757
Hauling	< 0.005	< 0.005	0.16	0.04	< 0.005	< 0.005	29.5	29.5	< 0.005	2.94	2.95	—	130	130	< 0.005	0.02	0.01	136
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.35	0.32	0.36	4.47	0.00	0.00	864	864	0.00	86.3	86.3	—	867	867	0.04	0.03	1.25	879
Vendor	0.03	0.02	0.59	0.24	< 0.005	0.01	127	127	0.01	12.7	12.7	—	519	519	0.01	0.07	0.50	541
Hauling	< 0.005	< 0.005	0.11	0.03	< 0.005	< 0.005	20.8	20.8	< 0.005	2.08	2.08	—	92.9	92.9	< 0.005	0.01	0.08	97.4

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.07	0.82	0.00	0.00	158	158	0.00	15.7	15.7	—	144	144	0.01	0.01	0.21	145
Vendor	< 0.005	< 0.005	0.11	0.04	< 0.005	< 0.005	23.2	23.2	< 0.005	2.32	2.32	—	85.9	85.9	< 0.005	0.01	0.08	89.6
Hauling	< 0.005	< 0.005	0.02	< 0.005	< 0.005	< 0.005	3.79	3.79	< 0.005	0.38	0.38	—	15.4	15.4	< 0.005	< 0.005	0.01	16.1

3.7. Demolition (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.17	2.17	27.0	109	0.20	0.38	—	0.38	0.38	—	0.38	—	20,571	20,571	0.83	0.17	—	20,642
Demolition	—	—	—	—	—	—	0.03	0.03	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.17	2.17	27.0	109	0.20	0.38	—	0.38	0.38	—	0.38	—	20,571	20,571	0.83	0.17	—	20,642
Demolition	—	—	—	—	—	—	0.03	0.03	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	1.56	1.56	19.4	78.1	0.14	0.27	—	0.27	0.27	—	0.27	—	14,734	14,734	0.60	0.12	—	14,785
Demolition	—	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.28	0.28	3.53	14.3	0.03	0.05	—	0.05	0.05	—	0.05	—	2,439	2,439	0.10	0.02	—	2,448
Demolition	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.54	0.46	0.43	8.18	0.00	0.00	1,226	1,226	0.00	122	122	—	1,311	1,311	0.05	0.04	3.68	1,329
Vendor	0.03	0.02	0.74	0.31	0.01	0.01	180	180	0.01	18.0	18.0	—	708	708	0.01	0.10	1.39	738
Hauling	< 0.005	< 0.005	0.14	0.04	< 0.005	< 0.005	29.5	29.5	< 0.005	2.94	2.95	—	127	127	< 0.005	0.02	0.24	133
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.41	0.37	0.51	4.58	0.00	0.00	1,226	1,226	0.00	122	122	—	1,109	1,109	0.02	0.04	0.10	1,122
Vendor	0.03	0.02	0.81	0.32	0.01	0.01	180	180	0.01	18.0	18.0	—	708	708	0.01	0.10	0.04	737
Hauling	< 0.005	< 0.005	0.15	0.04	< 0.005	< 0.005	29.5	29.5	< 0.005	2.94	2.95	—	127	127	< 0.005	0.02	0.01	133
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.31	0.28	0.33	4.16	0.00	0.00	866	866	0.00	86.5	86.5	—	853	853	0.04	0.03	1.14	865
Vendor	0.02	0.02	0.57	0.23	< 0.005	0.01	127	127	0.01	12.7	12.7	—	507	507	0.01	0.07	0.43	528
Hauling	< 0.005	< 0.005	0.11	0.03	< 0.005	< 0.005	20.8	20.8	< 0.005	2.08	2.08	—	90.7	90.7	< 0.005	0.01	0.07	95.1

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.06	0.76	0.00	0.00	158	158	0.00	15.8	15.8	—	141	141	0.01	0.01	0.19	143
Vendor	< 0.005	< 0.005	0.10	0.04	< 0.005	< 0.005	23.3	23.3	< 0.005	2.32	2.33	—	84.0	84.0	< 0.005	0.01	0.07	87.5
Hauling	< 0.005	< 0.005	0.02	< 0.005	< 0.005	< 0.005	3.80	3.80	< 0.005	0.38	0.38	—	15.0	15.0	< 0.005	< 0.005	0.01	15.7

3.9. Demolition (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.17	2.17	27.0	109	0.20	0.38	—	0.38	0.38	—	0.38	—	20,561	20,561	0.83	0.17	—	20,631
Demolition	—	—	—	—	—	—	0.03	0.03	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.17	2.17	27.0	109	0.20	0.38	—	0.38	0.38	—	0.38	—	20,561	20,561	0.83	0.17	—	20,631
Demolition	—	—	—	—	—	—	0.03	0.03	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	1.55	1.55	19.3	77.9	0.14	0.27	—	0.27	0.27	—	0.27	—	14,686	14,686	0.60	0.12	—	14,736
Demolition	—	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.28	0.28	3.52	14.2	0.03	0.05	—	0.05	0.05	—	0.05	—	2,431	2,431	0.10	0.02	—	2,440
Demolition	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.48	0.43	0.39	7.54	0.00	0.00	1,226	1,226	0.00	122	122	—	1,287	1,287	0.05	0.04	3.32	1,305
Vendor	0.03	0.02	0.71	0.29	0.01	0.01	180	180	0.01	18.0	18.0	—	688	688	0.01	0.10	1.18	718
Hauling	< 0.005	< 0.005	0.14	0.04	< 0.005	< 0.005	29.5	29.5	< 0.005	2.94	2.95	—	123	123	< 0.005	0.02	0.22	129
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.39	0.35	0.43	4.22	0.00	0.00	1,226	1,226	0.00	122	122	—	1,089	1,089	0.02	0.04	0.09	1,102
Vendor	0.03	0.02	0.77	0.30	0.01	0.01	180	180	0.01	18.0	18.0	—	689	689	0.01	0.10	0.03	718
Hauling	< 0.005	< 0.005	0.15	0.04	< 0.005	< 0.005	29.5	29.5	< 0.005	2.94	2.95	—	123	123	< 0.005	0.02	0.01	129
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.30	0.27	0.30	3.85	0.00	0.00	864	864	0.00	86.3	86.3	—	836	836	0.01	0.03	1.02	846
Vendor	0.02	0.01	0.54	0.21	< 0.005	0.01	127	127	0.01	12.7	12.7	—	492	492	0.01	0.07	0.36	513
Hauling	< 0.005	< 0.005	0.11	0.03	< 0.005	< 0.005	20.8	20.8	< 0.005	2.08	2.08	—	88.1	88.1	< 0.005	0.01	0.07	92.3

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.06	0.70	0.00	0.00	158	158	0.00	15.7	15.7	—	138	138	< 0.005	0.01	0.17	140
Vendor	< 0.005	< 0.005	0.10	0.04	< 0.005	< 0.005	23.2	23.2	< 0.005	2.32	2.32	—	81.4	81.4	< 0.005	0.01	0.06	84.9
Hauling	< 0.005	< 0.005	0.02	< 0.005	< 0.005	< 0.005	3.79	3.79	< 0.005	0.38	0.38	—	14.6	14.6	< 0.005	< 0.005	0.01	15.3

3.11. Site Preparation (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.99	2.99	15.5	170	0.29	0.60	—	0.60	0.60	—	0.60	—	31,772	31,772	1.29	0.26	—	31,881
Dust From Material Movement	—	—	—	—	—	—	30.7	30.7	—	15.8	15.8	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.99	2.99	15.5	170	0.29	0.60	—	0.60	0.60	—	0.60	—	31,772	31,772	1.29	0.26	—	31,881
Dust From Material Movement	—	—	—	—	—	—	30.7	30.7	—	15.8	15.8	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.13	2.13	11.1	121	0.21	0.43	—	0.43	0.43	—	0.43	—	22,694	22,694	0.92	0.18	—	22,772
Dust From Material Movement	—	—	—	—	—	—	21.9	21.9	—	11.3	11.3	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.39	0.39	2.03	22.1	0.04	0.08	—	0.08	0.08	—	0.08	—	3,757	3,757	0.15	0.03	—	3,770
Dust From Material Movement	—	—	—	—	—	—	4.00	4.00	—	2.05	2.05	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.81	0.71	0.67	12.7	0.00	0.00	1,471	1,471	0.00	147	147	—	1,664	1,664	0.07	0.05	5.86	1,687
Vendor	0.04	0.03	0.84	0.39	0.01	0.01	180	180	0.01	18.0	18.0	—	755	755	0.01	0.10	2.08	788
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.61	0.55	0.80	7.16	0.00	0.00	1,471	1,471	0.00	147	147	—	1,405	1,405	0.07	0.05	0.15	1,423
Vendor	0.04	0.03	0.93	0.40	0.01	0.01	180	180	0.01	18.0	18.0	—	756	756	0.01	0.10	0.05	787

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.50	0.43	0.53	6.45	0.00	0.00	1,037	1,037	0.00	104	104	—	1,079	1,079	0.05	0.04	1.81	1,094
Vendor	0.03	0.02	0.65	0.28	< 0.005	0.01	127	127	0.01	12.7	12.7	—	540	540	0.01	0.07	0.64	562
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.10	1.18	0.00	0.00	189	189	0.00	18.9	18.9	—	179	179	0.01	0.01	0.30	181
Vendor	0.01	< 0.005	0.12	0.05	< 0.005	< 0.005	23.2	23.2	< 0.005	2.32	2.32	—	89.4	89.4	< 0.005	0.01	0.11	93.1
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Site Preparation (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.99	2.99	15.5	170	0.29	0.60	—	0.60	0.60	—	0.60	—	31,788	31,788	1.29	0.26	—	31,897
Dust From Material Movement	—	—	—	—	—	—	30.7	30.7	—	15.8	15.8	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	2.99	2.99	15.5	170	0.29	0.60	—	0.60	0.60	—	0.60	—	31,788	31,788	1.29	0.26	—	31,897
Dust From Material Movement	—	—	—	—	—	—	30.7	30.7	—	15.8	15.8	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.13	2.13	11.1	121	0.21	0.43	—	0.43	0.43	—	0.43	—	22,705	22,705	0.92	0.18	—	22,783
Dust From Material Movement	—	—	—	—	—	—	21.9	21.9	—	11.3	11.3	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.39	0.39	2.03	22.1	0.04	0.08	—	0.08	0.08	—	0.08	—	3,759	3,759	0.15	0.03	—	3,772
Dust From Material Movement	—	—	—	—	—	—	4.00	4.00	—	2.05	2.05	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.72	0.67	0.62	11.7	0.00	0.00	1,471	1,471	0.00	147	147	—	1,632	1,632	0.06	0.05	5.35	1,655

Vendor	0.04	0.03	0.80	0.36	0.01	0.01	180	180	0.01	18.0	18.0	—	741	741	0.01	0.10	1.86	774
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.58	0.53	0.70	6.58	0.00	0.00	1,471	1,471	0.00	147	147	—	1,379	1,379	0.07	0.05	0.14	1,397
Vendor	0.04	0.03	0.88	0.37	0.01	0.01	180	180	0.01	18.0	18.0	—	742	742	0.01	0.10	0.05	773
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.44	0.40	0.50	5.95	0.00	0.00	1,037	1,037	0.00	104	104	—	1,059	1,059	0.05	0.04	1.65	1,073
Vendor	0.03	0.02	0.62	0.26	< 0.005	0.01	127	127	0.01	12.7	12.7	—	530	530	0.01	0.07	0.57	552
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.09	1.09	0.00	0.00	189	189	0.00	18.9	18.9	—	175	175	0.01	0.01	0.27	178
Vendor	< 0.005	< 0.005	0.11	0.05	< 0.005	< 0.005	23.2	23.2	< 0.005	2.32	2.32	—	87.7	87.7	< 0.005	0.01	0.09	91.4
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.15. Site Preparation (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.99	2.99	15.5	170	0.29	0.60	—	0.60	0.60	—	0.60	—	31,787	31,787	1.29	0.26	—	31,896

Dust From Material Movement	—	—	—	—	—	—	30.7	30.7	—	15.8	15.8	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.99	2.99	15.5	170	0.29	0.60	—	0.60	0.60	—	0.60	—	31,787	31,787	1.29	0.26	—	31,896
Dust From Material Movement	—	—	—	—	—	—	30.7	30.7	—	15.8	15.8	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.13	2.13	11.1	121	0.21	0.43	—	0.43	0.43	—	0.43	—	22,705	22,705	0.92	0.18	—	22,783
Dust From Material Movement	—	—	—	—	—	—	21.9	21.9	—	11.3	11.3	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.39	0.39	2.03	22.1	0.04	0.08	—	0.08	0.08	—	0.08	—	3,759	3,759	0.15	0.03	—	3,772

Dust From Material Movement	—	—	—	—	—	—	4.00	4.00	—	2.05	2.05	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.68	0.63	0.57	10.6	0.00	0.00	1,471	1,471	0.00	147	147	—	1,603	1,603	0.06	0.05	4.87	1,626
Vendor	0.04	0.03	0.77	0.34	0.01	0.01	180	180	0.01	18.0	18.0	—	726	726	0.01	0.10	1.62	758
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.51	0.46	0.66	5.92	0.00	0.00	1,471	1,471	0.00	147	147	—	1,355	1,355	0.07	0.05	0.13	1,373
Vendor	0.03	0.03	0.84	0.34	0.01	0.01	180	180	0.01	18.0	18.0	—	727	727	0.01	0.10	0.04	757
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.42	0.39	0.43	5.36	0.00	0.00	1,037	1,037	0.00	104	104	—	1,041	1,041	0.05	0.04	1.50	1,054
Vendor	0.03	0.02	0.59	0.24	< 0.005	0.01	127	127	0.01	12.7	12.7	—	519	519	0.01	0.07	0.50	541
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.08	0.98	0.00	0.00	189	189	0.00	18.9	18.9	—	172	172	0.01	0.01	0.25	175
Vendor	< 0.005	< 0.005	0.11	0.04	< 0.005	< 0.005	23.2	23.2	< 0.005	2.32	2.32	—	85.9	85.9	< 0.005	0.01	0.08	89.6
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.17. Site Preparation (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.99	2.99	15.5	170	0.29	0.60	—	0.60	0.60	—	0.60	—	31,800	31,800	1.29	0.26	—	31,909
Dust From Material Movement	—	—	—	—	—	—	30.7	30.7	—	15.8	15.8	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.99	2.99	15.5	170	0.29	0.60	—	0.60	0.60	—	0.60	—	31,800	31,800	1.29	0.26	—	31,909
Dust From Material Movement	—	—	—	—	—	—	30.7	30.7	—	15.8	15.8	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.14	2.14	11.1	122	0.21	0.43	—	0.43	0.43	—	0.43	—	22,777	22,777	0.92	0.18	—	22,855
Dust From Material Movement	—	—	—	—	—	—	22.0	22.0	—	11.3	11.3	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.39	0.39	2.03	22.2	0.04	0.08	—	0.08	0.08	—	0.08	—	3,771	3,771	0.15	0.03	—	3,784
Dust From Material Movement	—	—	—	—	—	—	4.01	4.01	—	2.06	2.06	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.65	0.55	0.52	9.81	0.00	0.00	1,471	1,471	0.00	147	147	—	1,573	1,573	0.06	0.05	4.42	1,595
Vendor	0.03	0.02	0.74	0.31	0.01	0.01	180	180	0.01	18.0	18.0	—	708	708	0.01	0.10	1.39	738
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.49	0.44	0.61	5.49	0.00	0.00	1,471	1,471	0.00	147	147	—	1,330	1,330	0.02	0.05	0.11	1,347
Vendor	0.03	0.02	0.81	0.32	0.01	0.01	180	180	0.01	18.0	18.0	—	708	708	0.01	0.10	0.04	737
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.38	0.34	0.40	4.99	0.00	0.00	1,040	1,040	0.00	104	104	—	1,024	1,024	0.05	0.04	1.37	1,037
Vendor	0.02	0.02	0.57	0.23	< 0.005	0.01	127	127	0.01	12.7	12.7	—	507	507	0.01	0.07	0.43	528
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.07	0.91	0.00	0.00	190	190	0.00	18.9	18.9	—	170	170	0.01	0.01	0.23	172

Vendor	< 0.005	< 0.005	0.10	0.04	< 0.005	< 0.005	23.3	23.3	< 0.005	2.32	2.33	—	84.0	84.0	< 0.005	0.01	0.07	87.5
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.19. Site Preparation (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.99	2.99	15.5	170	0.29	0.60	—	0.60	0.60	—	0.60	—	31,776	31,776	1.29	0.26	—	31,885
Dust From Material Movement	—	—	—	—	—	—	30.7	30.7	—	15.8	15.8	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.99	2.99	15.5	170	0.29	0.60	—	0.60	0.60	—	0.60	—	31,776	31,776	1.29	0.26	—	31,885
Dust From Material Movement	—	—	—	—	—	—	30.7	30.7	—	15.8	15.8	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	2.13	2.13	11.1	121	0.21	0.43	—	0.43	0.43	—	0.43	—	22,697	22,697	0.92	0.18	—	22,775
Dust From Material Movement	—	—	—	—	—	—	21.9	21.9	—	11.3	11.3	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.39	0.39	2.03	22.1	0.04	0.08	—	0.08	0.08	—	0.08	—	3,758	3,758	0.15	0.03	—	3,771
Dust From Material Movement	—	—	—	—	—	—	4.00	4.00	—	2.05	2.05	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.57	0.52	0.47	9.05	0.00	0.00	1,471	1,471	0.00	147	147	—	1,544	1,544	0.06	0.05	3.99	1,565
Vendor	0.03	0.02	0.71	0.29	0.01	0.01	180	180	0.01	18.0	18.0	—	688	688	0.01	0.10	1.18	718
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.47	0.42	0.51	5.07	0.00	0.00	1,471	1,471	0.00	147	147	—	1,306	1,306	0.02	0.05	0.10	1,322
Vendor	0.03	0.02	0.77	0.30	0.01	0.01	180	180	0.01	18.0	18.0	—	689	689	0.01	0.10	0.03	718
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.36	0.32	0.36	4.62	0.00	0.00	1,037	1,037	0.00	104	104	—	1,003	1,003	0.01	0.04	1.23	1,015

Vendor	0.02	0.01	0.54	0.21	< 0.005	0.01	127	127	0.01	12.7	12.7	—	492	492	0.01	0.07	0.36	513
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.07	0.84	0.00	0.00	189	189	0.00	18.9	18.9	—	166	166	< 0.005	0.01	0.20	168
Vendor	< 0.005	< 0.005	0.10	0.04	< 0.005	< 0.005	23.2	23.2	< 0.005	2.32	2.32	—	81.4	81.4	< 0.005	0.01	0.06	84.9
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.21. Grading (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.84	3.84	26.6	212	0.37	0.74	—	0.74	0.74	—	0.74	—	39,593	39,593	1.61	0.32	—	39,729
Dust From Material Movement	—	—	—	—	—	—	14.4	14.4	—	5.70	5.70	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.84	3.84	26.6	212	0.37	0.74	—	0.74	0.74	—	0.74	—	39,593	39,593	1.61	0.32	—	39,729

Dust From Material Movement	—	—	—	—	—	—	14.4	14.4	—	5.70	5.70	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.74	2.74	19.0	151	0.26	0.53	—	0.53	0.53	—	0.53	—	28,281	28,281	1.15	0.23	—	28,378
Dust From Material Movement	—	—	—	—	—	—	10.3	10.3	—	4.07	4.07	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	0.50	3.46	27.6	0.05	0.10	—	0.10	0.10	—	0.10	—	4,682	4,682	0.19	0.04	—	4,698
Dust From Material Movement	—	—	—	—	—	—	1.87	1.87	—	0.74	0.74	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.90	0.79	0.74	14.1	0.00	0.00	1,635	1,635	0.00	163	163	—	1,849	1,849	0.07	0.06	6.52	1,875
Vendor	0.04	0.03	0.84	0.39	0.01	0.01	180	180	0.01	18.0	18.0	—	755	755	0.01	0.10	2.08	788
Hauling	0.10	0.07	3.63	0.91	0.02	0.06	707	707	0.06	70.6	70.7	—	3,261	3,261	0.03	0.52	7.05	3,425

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.68	0.62	0.89	7.95	0.00	0.00	1,635	1,635	0.00	163	163	—	1,562	1,562	0.08	0.06	0.17	1,581
Vendor	0.04	0.03	0.93	0.40	0.01	0.01	180	180	0.01	18.0	18.0	—	756	756	0.01	0.10	0.05	787
Hauling	0.09	0.06	4.01	0.94	0.02	0.06	707	707	0.06	70.6	70.7	—	3,263	3,263	0.03	0.52	0.18	3,420
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.55	0.48	0.59	7.16	0.00	0.00	1,152	1,152	0.00	115	115	—	1,199	1,199	0.05	0.04	2.01	1,215
Vendor	0.03	0.02	0.65	0.28	< 0.005	0.01	127	127	0.01	12.7	12.7	—	540	540	0.01	0.07	0.64	562
Hauling	0.07	0.05	2.81	0.66	0.02	0.05	498	498	0.05	49.8	49.8	—	2,330	2,330	0.02	0.37	2.18	2,444
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.09	0.11	1.31	0.00	0.00	210	210	0.00	21.0	21.0	—	199	199	0.01	0.01	0.33	201
Vendor	0.01	< 0.005	0.12	0.05	< 0.005	< 0.005	23.2	23.2	< 0.005	2.32	2.32	—	89.4	89.4	< 0.005	0.01	0.11	93.1
Hauling	0.01	0.01	0.51	0.12	< 0.005	0.01	91.0	91.0	0.01	9.09	9.10	—	386	386	< 0.005	0.06	0.36	405

3.23. Grading (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.84	3.84	26.6	212	0.37	0.74	—	0.74	0.74	—	0.74	—	39,591	39,591	1.61	0.32	—	39,727
Dust From Material Movement	—	—	—	—	—	—	14.4	14.4	—	5.70	5.70	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.84	3.84	26.6	212	0.37	0.74	—	0.74	0.74	—	0.74	—	39,591	39,591	1.61	0.32	—	39,727
Dust From Material Movement	—	—	—	—	—	—	14.4	14.4	—	5.70	5.70	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.74	2.74	19.0	151	0.26	0.53	—	0.53	0.53	—	0.53	—	28,280	28,280	1.15	0.23	—	28,377
Dust From Material Movement	—	—	—	—	—	—	10.3	10.3	—	4.07	4.07	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	0.50	3.46	27.6	0.05	0.10	—	0.10	0.10	—	0.10	—	4,682	4,682	0.19	0.04	—	4,698
Dust From Material Movement	—	—	—	—	—	—	1.87	1.87	—	0.74	0.74	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.80	0.74	0.69	13.0	0.00	0.00	1,635	1,635	0.00	163	163	—	1,813	1,813	0.07	0.06	5.95	1,838
Vendor	0.04	0.03	0.80	0.36	0.01	0.01	180	180	0.01	18.0	18.0	—	741	741	0.01	0.10	1.86	774
Hauling	0.10	0.07	3.55	0.89	0.02	0.06	707	707	0.06	70.7	70.7	—	3,192	3,192	0.03	0.50	6.69	3,349
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.65	0.58	0.78	7.31	0.00	0.00	1,635	1,635	0.00	163	163	—	1,532	1,532	0.08	0.06	0.15	1,552
Vendor	0.04	0.03	0.88	0.37	0.01	0.01	180	180	0.01	18.0	18.0	—	742	742	0.01	0.10	0.05	773
Hauling	0.09	0.06	3.90	0.91	0.02	0.06	707	707	0.06	70.7	70.7	—	3,195	3,195	0.03	0.50	0.17	3,345
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.49	0.45	0.56	6.61	0.00	0.00	1,152	1,152	0.00	115	115	—	1,177	1,177	0.05	0.04	1.83	1,192
Vendor	0.03	0.02	0.62	0.26	< 0.005	0.01	127	127	0.01	12.7	12.7	—	530	530	0.01	0.07	0.57	552
Hauling	0.07	0.05	2.73	0.64	0.02	0.05	498	498	0.05	49.8	49.9	—	2,281	2,281	0.02	0.36	2.06	2,390
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.10	1.21	0.00	0.00	210	210	0.00	21.0	21.0	—	195	195	0.01	0.01	0.30	197
Vendor	< 0.005	< 0.005	0.11	0.05	< 0.005	< 0.005	23.2	23.2	< 0.005	2.32	2.32	—	87.7	87.7	< 0.005	0.01	0.09	91.4
Hauling	0.01	0.01	0.50	0.12	< 0.005	0.01	91.0	91.0	0.01	9.09	9.10	—	378	378	< 0.005	0.06	0.34	396

3.25. Grading (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	3.84	3.84	26.6	212	0.37	0.74	—	0.74	0.74	—	0.74	—	39,588	39,588	1.61	0.32	—	39,724
Dust From Material Movement	—	—	—	—	—	—	14.4	14.4	—	5.70	5.70	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.84	3.84	26.6	212	0.37	0.74	—	0.74	0.74	—	0.74	—	39,588	39,588	1.61	0.32	—	39,724
Dust From Material Movement	—	—	—	—	—	—	14.4	14.4	—	5.70	5.70	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.74	2.74	19.0	151	0.26	0.53	—	0.53	0.53	—	0.53	—	28,277	28,277	1.15	0.23	—	28,375
Dust From Material Movement	—	—	—	—	—	—	10.3	10.3	—	4.07	4.07	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	0.50	3.46	27.6	0.05	0.10	—	0.10	0.10	—	0.10	—	4,682	4,682	0.19	0.04	—	4,698

Dust From Material Movement	—	—	—	—	—	—	1.87	1.87	—	0.74	0.74	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.76	0.70	0.63	11.8	0.00	0.00	1,635	1,635	0.00	163	163	—	1,781	1,781	0.07	0.06	5.41	1,806
Vendor	0.04	0.03	0.77	0.34	0.01	0.01	180	180	0.01	18.0	18.0	—	726	726	0.01	0.10	1.62	758
Hauling	0.10	0.07	3.46	0.87	0.02	0.06	707	707	0.06	70.7	70.7	—	3,119	3,119	0.03	0.50	6.20	3,276
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.57	0.51	0.73	6.58	0.00	0.00	1,635	1,635	0.00	163	163	—	1,506	1,506	0.08	0.06	0.14	1,526
Vendor	0.03	0.03	0.84	0.34	0.01	0.01	180	180	0.01	18.0	18.0	—	727	727	0.01	0.10	0.04	757
Hauling	0.09	0.06	3.81	0.89	0.02	0.06	707	707	0.06	70.7	70.7	—	3,122	3,122	0.03	0.50	0.16	3,272
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.47	0.43	0.48	5.96	0.00	0.00	1,152	1,152	0.00	115	115	—	1,156	1,156	0.05	0.04	1.67	1,171
Vendor	0.03	0.02	0.59	0.24	< 0.005	0.01	127	127	0.01	12.7	12.7	—	519	519	0.01	0.07	0.50	541
Hauling	0.07	0.05	2.67	0.63	0.02	0.05	498	498	0.05	49.8	49.9	—	2,229	2,229	0.02	0.36	1.92	2,338
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.09	1.09	0.00	0.00	210	210	0.00	21.0	21.0	—	191	191	0.01	0.01	0.28	194
Vendor	< 0.005	< 0.005	0.11	0.04	< 0.005	< 0.005	23.2	23.2	< 0.005	2.32	2.32	—	85.9	85.9	< 0.005	0.01	0.08	89.6
Hauling	0.01	0.01	0.49	0.12	< 0.005	0.01	91.0	91.0	0.01	9.09	9.10	—	369	369	< 0.005	0.06	0.32	387

3.27. Grading (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.84	3.84	26.6	212	0.37	0.74	—	0.74	0.74	—	0.74	—	39,590	39,590	1.61	0.32	—	39,725
Dust From Material Movement	—	—	—	—	—	—	14.4	14.4	—	5.70	5.70	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.84	3.84	26.6	212	0.37	0.74	—	0.74	0.74	—	0.74	—	39,590	39,590	1.61	0.32	—	39,725
Dust From Material Movement	—	—	—	—	—	—	14.4	14.4	—	5.70	5.70	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.75	2.75	19.0	152	0.26	0.53	—	0.53	0.53	—	0.53	—	28,356	28,356	1.15	0.23	—	28,453
Dust From Material Movement	—	—	—	—	—	—	10.3	10.3	—	4.08	4.08	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	0.50	3.47	27.7	0.05	0.10	—	0.10	0.10	—	0.10	—	4,695	4,695	0.19	0.04	—	4,711
Dust From Material Movement	—	—	—	—	—	—	1.88	1.88	—	0.75	0.75	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.72	0.62	0.58	10.9	0.00	0.00	1,635	1,635	0.00	163	163	—	1,748	1,748	0.07	0.06	4.91	1,772
Vendor	0.03	0.02	0.74	0.31	0.01	0.01	180	180	0.01	18.0	18.0	—	708	708	0.01	0.10	1.39	738
Hauling	0.10	0.07	3.37	0.86	0.02	0.06	707	707	0.06	70.7	70.7	—	3,038	3,038	0.03	0.48	5.75	3,188
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.55	0.49	0.67	6.10	0.00	0.00	1,635	1,635	0.00	163	163	—	1,478	1,478	0.02	0.06	0.13	1,497
Vendor	0.03	0.02	0.81	0.32	0.01	0.01	180	180	0.01	18.0	18.0	—	708	708	0.01	0.10	0.04	737
Hauling	0.09	0.06	3.70	0.88	0.02	0.06	707	707	0.06	70.7	70.7	—	3,041	3,041	0.03	0.48	0.15	3,185
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.42	0.38	0.44	5.54	0.00	0.00	1,155	1,155	0.00	115	115	—	1,138	1,138	0.05	0.04	1.52	1,153
Vendor	0.02	0.02	0.57	0.23	< 0.005	0.01	127	127	0.01	12.7	12.7	—	507	507	0.01	0.07	0.43	528
Hauling	0.07	0.05	2.61	0.62	0.02	0.05	500	500	0.05	49.9	50.0	—	2,177	2,177	0.02	0.34	1.78	2,282
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.08	1.01	0.00	0.00	211	211	0.00	21.1	21.1	—	188	188	0.01	0.01	0.25	191

Vendor	< 0.005	< 0.005	0.10	0.04	< 0.005	< 0.005	23.3	23.3	< 0.005	2.32	2.33	—	84.0	84.0	< 0.005	0.01	0.07	87.5
Hauling	0.01	0.01	0.48	0.11	< 0.005	0.01	91.2	91.2	0.01	9.11	9.12	—	360	360	< 0.005	0.06	0.30	378

3.29. Grading (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.84	3.84	26.6	212	0.37	0.74	—	0.74	0.74	—	0.74	—	39,577	39,577	1.61	0.32	—	39,713
Dust From Material Movement	—	—	—	—	—	—	14.4	14.4	—	5.70	5.70	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.84	3.84	26.6	212	0.37	0.74	—	0.74	0.74	—	0.74	—	39,577	39,577	1.61	0.32	—	39,713
Dust From Material Movement	—	—	—	—	—	—	14.4	14.4	—	5.70	5.70	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	2.74	2.74	19.0	151	0.26	0.53	—	0.53	0.53	—	0.53	—	28,269	28,269	1.15	0.23	—	28,366
Dust From Material Movement	—	—	—	—	—	—	10.3	10.3	—	4.07	4.07	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.50	0.50	3.46	27.6	0.05	0.10	—	0.10	0.10	—	0.10	—	4,680	4,680	0.19	0.04	—	4,696
Dust From Material Movement	—	—	—	—	—	—	1.87	1.87	—	0.74	0.74	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.64	0.58	0.52	10.1	0.00	0.00	1,635	1,635	0.00	163	163	—	1,716	1,716	0.07	0.06	4.43	1,739
Vendor	0.03	0.02	0.71	0.29	0.01	0.01	180	180	0.01	18.0	18.0	—	688	688	0.01	0.10	1.18	718
Hauling	0.10	0.07	3.30	0.86	0.02	0.06	707	707	0.06	70.7	70.7	—	2,959	2,959	0.03	0.46	5.33	3,102
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.53	0.47	0.57	5.63	0.00	0.00	1,635	1,635	0.00	163	163	—	1,452	1,452	0.02	0.06	0.11	1,469
Vendor	0.03	0.02	0.77	0.30	0.01	0.01	180	180	0.01	18.0	18.0	—	689	689	0.01	0.10	0.03	718
Hauling	0.09	0.06	3.61	0.88	0.02	0.06	707	707	0.06	70.7	70.7	—	2,961	2,961	0.03	0.46	0.14	3,099
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.40	0.36	0.40	5.13	0.00	0.00	1,152	1,152	0.00	115	115	—	1,114	1,114	0.01	0.04	1.36	1,128

Vendor	0.02	0.01	0.54	0.21	< 0.005	0.01	127	127	0.01	12.7	12.7	—	492	492	0.01	0.07	0.36	513
Hauling	0.07	0.05	2.54	0.62	0.02	0.05	498	498	0.05	49.8	49.9	—	2,114	2,114	0.02	0.33	1.64	2,214
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.07	0.94	0.00	0.00	210	210	0.00	21.0	21.0	—	184	184	< 0.005	0.01	0.23	187
Vendor	< 0.005	< 0.005	0.10	0.04	< 0.005	< 0.005	23.2	23.2	< 0.005	2.32	2.32	—	81.4	81.4	< 0.005	0.01	0.06	84.9
Hauling	0.01	0.01	0.46	0.11	< 0.005	0.01	91.0	91.0	0.01	9.09	9.10	—	350	350	< 0.005	0.05	0.27	367

3.31. Building Construction (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.56	1.56	17.6	93.8	0.15	0.28	—	0.28	0.28	—	0.28	—	14,876	14,876	0.60	0.12	—	14,927
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.56	1.56	17.6	93.8	0.15	0.28	—	0.28	0.28	—	0.28	—	14,876	14,876	0.60	0.12	—	14,927
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	1.11	1.11	12.5	67.0	0.10	0.20	—	0.20	0.20	—	0.20	—	10,625	10,625	0.43	0.09	—	10,662
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.20	0.20	2.29	12.2	0.02	0.04	—	0.04	0.04	—	0.04	—	1,759	1,759	0.07	0.01	—	1,765
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	46.0	40.5	38.0	724	0.00	0.00	84,013	84,013	0.00	8,389	8,389	—	95,018	95,018	3.74	3.06	335	96,359
Vendor	4.19	3.17	85.0	39.4	0.60	1.09	18,162	18,163	1.09	1,815	1,816	—	76,108	76,108	0.92	10.3	210	79,417
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	34.9	31.6	45.6	409	0.00	0.00	84,013	84,013	0.00	8,389	8,389	—	80,264	80,264	4.01	3.06	8.67	81,285
Vendor	3.71	2.74	93.5	40.4	0.60	1.09	18,162	18,163	1.09	1,815	1,816	—	76,167	76,167	0.92	10.3	5.44	79,271
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	28.5	24.4	30.5	368	0.00	0.00	59,221	59,221	0.00	5,913	5,913	—	61,646	61,646	2.67	2.19	103	62,468
Vendor	2.80	2.11	65.8	28.5	0.43	0.78	12,802	12,803	0.78	1,279	1,280	—	54,381	54,381	0.65	7.37	65.0	56,659
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.20	4.46	5.57	67.2	0.00	0.00	10,808	10,808	0.00	1,079	1,079	—	10,206	10,206	0.44	0.36	17.1	10,342

Vendor	0.51	0.38	12.0	5.21	0.08	0.14	2,336	2,337	0.14	233	234	—	9,003	9,003	0.11	1.22	10.8	9,380
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.33. Building Construction (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.56	1.56	17.6	93.8	0.15	0.28	—	0.28	0.28	—	0.28	—	14,873	14,873	0.60	0.12	—	14,924
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.56	1.56	17.6	93.8	0.15	0.28	—	0.28	0.28	—	0.28	—	14,873	14,873	0.60	0.12	—	14,924
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.11	1.11	12.5	67.0	0.10	0.20	—	0.20	0.20	—	0.20	—	10,624	10,624	0.43	0.09	—	10,660
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.20	0.20	2.29	12.2	0.02	0.04	—	0.04	0.04	—	0.04	—	1,759	1,759	0.07	0.01	—	1,765
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	41.1	38.0	35.2	667	0.00	0.00	84,013	84,013	0.00	8,389	8,389	—	93,190	93,190	3.60	3.06	306	94,498
Vendor	4.14	3.11	80.9	36.4	0.60	1.09	18,162	18,163	1.09	1,815	1,816	—	74,669	74,669	0.92	10.3	187	77,954
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	33.2	30.0	40.3	376	0.00	0.00	84,013	84,013	0.00	8,389	8,389	—	78,754	78,754	3.88	3.06	7.91	79,770
Vendor	3.71	2.69	88.9	37.2	0.60	1.09	18,162	18,163	1.09	1,815	1,816	—	74,730	74,730	0.92	10.3	4.87	77,833
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	25.3	23.1	28.6	340	0.00	0.00	59,221	59,221	0.00	5,913	5,913	—	60,475	60,475	2.67	2.19	94.3	61,288
Vendor	2.73	2.03	62.5	26.3	0.43	0.78	12,802	12,803	0.78	1,279	1,280	—	53,353	53,353	0.65	7.37	57.8	55,624
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.61	4.21	5.21	62.0	0.00	0.00	10,808	10,808	0.00	1,079	1,079	—	10,012	10,012	0.44	0.36	15.6	10,147
Vendor	0.50	0.37	11.4	4.80	0.08	0.14	2,336	2,337	0.14	233	234	—	8,833	8,833	0.11	1.22	9.56	9,209
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.35. Building Construction (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.56	1.56	17.6	93.8	0.15	0.28	—	0.28	0.28	—	0.28	—	14,872	14,872	0.60	0.12	—	14,923
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.56	1.56	17.6	93.8	0.15	0.28	—	0.28	0.28	—	0.28	—	14,872	14,872	0.60	0.12	—	14,923
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.11	1.11	12.5	67.0	0.10	0.20	—	0.20	0.20	—	0.20	—	10,623	10,623	0.43	0.09	—	10,659
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.20	0.20	2.29	12.2	0.02	0.04	—	0.04	0.04	—	0.04	—	1,759	1,759	0.07	0.01	—	1,765
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	38.9	36.0	32.4	604	0.00	0.00	84,013	84,013	0.00	8,389	8,389	—	91,565	91,565	3.60	3.06	278	92,845
Vendor	4.03	3.06	77.2	33.9	0.60	1.09	18,162	18,163	1.09	1,815	1,816	—	73,146	73,146	0.92	10.3	163	76,392
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	29.3	26.2	37.5	338	0.00	0.00	84,013	84,013	0.00	8,389	8,389	—	77,414	77,414	3.88	3.06	7.19	78,429
Vendor	3.06	2.69	84.8	34.7	0.60	1.09	18,162	18,163	1.09	1,815	1,816	—	73,209	73,209	0.92	10.3	4.24	76,312
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	24.2	22.0	24.8	306	0.00	0.00	59,221	59,221	0.00	5,913	5,913	—	59,436	59,436	2.57	2.09	85.8	60,209
Vendor	2.69	2.03	59.5	24.5	0.43	0.78	12,802	12,803	0.78	1,279	1,280	—	52,266	52,266	0.65	7.33	50.4	54,518
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.41	4.01	4.52	55.9	0.00	0.00	10,808	10,808	0.00	1,079	1,079	—	9,840	9,840	0.43	0.35	14.2	9,968
Vendor	0.49	0.37	10.9	4.48	0.08	0.14	2,336	2,337	0.14	233	234	—	8,653	8,653	0.11	1.21	8.34	9,026
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.37. Building Construction (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.56	1.56	17.6	93.8	0.15	0.28	—	0.28	0.28	—	0.28	—	14,874	14,874	0.60	0.12	—	14,925

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.56	1.56	17.6	93.8	0.15	0.28	—	0.28	0.28	—	0.28	—	14,874	14,874	0.60	0.12	—	14,925
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.12	1.12	12.6	67.2	0.10	0.20	—	0.20	0.20	—	0.20	—	10,654	10,654	0.43	0.09	—	10,690
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.20	0.20	2.30	12.3	0.02	0.04	—	0.04	0.04	—	0.04	—	1,764	1,764	0.07	0.01	—	1,770
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	37.1	31.7	29.6	561	0.00	0.00	84,013	84,013	0.00	8,389	8,389	—	89,833	89,833	3.47	3.06	252	91,083
Vendor	3.38	2.46	74.2	31.4	0.54	1.09	18,162	18,163	1.09	1,815	1,816	—	71,300	71,300	0.92	9.67	140	74,345
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	28.1	25.0	34.7	314	0.00	0.00	84,013	84,013	0.00	8,389	8,389	—	75,975	75,975	1.22	3.06	6.55	76,924
Vendor	2.95	2.04	81.2	32.7	0.60	1.09	18,162	18,163	1.09	1,815	1,816	—	71,366	71,366	0.86	9.72	3.64	74,288
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	21.5	19.4	22.8	285	0.00	0.00	59,383	59,383	0.00	5,929	5,929	—	58,485	58,485	2.58	2.09	78.1	59,252
Vendor	2.27	1.61	57.1	22.8	0.39	0.78	12,838	12,838	0.78	1,283	1,284	—	51,088	51,088	0.62	6.96	43.3	53,222
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.92	3.54	4.17	52.0	0.00	0.00	10,837	10,837	0.00	1,082	1,082	—	9,683	9,683	0.43	0.35	12.9	9,810
Vendor	0.41	0.29	10.4	4.16	0.07	0.14	2,343	2,343	0.14	234	234	—	8,458	8,458	0.10	1.15	7.17	8,811
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.39. Building Construction (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.56	1.56	17.6	93.8	0.15	0.28	—	0.28	0.28	—	0.28	—	14,871	14,871	0.60	0.12	—	14,922
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	1.56	1.56	17.6	93.8	0.15	0.28	—	0.28	0.28	—	0.28	—	14,871	14,871	0.60	0.12	—	14,922
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.11	1.11	12.5	67.0	0.10	0.20	—	0.20	0.20	—	0.20	—	10,622	10,622	0.43	0.09	—	10,658
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.20	0.20	2.29	12.2	0.02	0.04	—	0.04	0.04	—	0.04	—	1,759	1,759	0.07	0.01	—	1,765
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	32.7	29.8	26.9	517	0.00	0.00	84,013	84,013	0.00	8,389	8,389	—	88,178	88,178	3.47	3.06	228	89,404
Vendor	3.33	2.36	71.1	29.5	0.54	1.09	18,162	18,163	1.09	1,815	1,816	—	69,354	69,354	0.86	9.67	119	72,377
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	27.0	23.9	29.4	289	0.00	0.00	84,013	84,013	0.00	8,389	8,389	—	74,613	74,613	1.09	2.92	5.90	75,517
Vendor	2.90	1.93	77.6	30.7	0.54	1.09	18,162	18,163	1.09	1,815	1,816	—	69,421	69,421	0.86	9.72	3.08	72,343
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	20.3	18.3	20.8	264	0.00	0.00	59,221	59,221	0.00	5,913	5,913	—	57,267	57,267	0.68	2.09	70.1	57,976
Vendor	2.19	1.49	54.4	21.4	0.39	0.78	12,802	12,803	0.78	1,279	1,280	—	49,558	49,558	0.62	6.91	36.7	51,669
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.71	3.33	3.79	48.1	0.00	0.00	10,808	10,808	0.00	1,079	1,079	—	9,481	9,481	0.11	0.35	11.6	9,599
Vendor	0.40	0.27	9.92	3.91	0.07	0.14	2,336	2,337	0.14	233	234	—	8,205	8,205	0.10	1.14	6.07	8,554
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.41. Paving (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.96	0.96	11.6	63.6	0.08	0.17	—	0.17	0.17	—	0.17	—	9,069	9,069	0.37	0.07	—	9,100
Paving	14.3	14.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.96	0.96	11.6	63.6	0.08	0.17	—	0.17	0.17	—	0.17	—	9,069	9,069	0.37	0.07	—	9,100
Paving	14.3	14.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.69	0.69	8.28	45.4	0.06	0.12	—	0.12	0.12	—	0.12	—	6,478	6,478	0.26	0.05	—	6,500
Paving	10.2	10.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.13	1.51	8.29	0.01	0.02	—	0.02	0.02	—	0.02	—	1,072	1,072	0.04	0.01	—	1,076
Paving	1.86	1.86	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.67	0.59	0.55	10.6	0.00	0.00	1,226	1,226	0.00	122	122	—	1,386	1,386	0.05	0.04	4.89	1,406
Vendor	0.04	0.03	0.84	0.39	0.01	0.01	180	180	0.01	18.0	18.0	—	755	755	0.01	0.10	2.08	788
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.51	0.46	0.66	5.96	0.00	0.00	1,226	1,226	0.00	122	122	—	1,171	1,171	0.06	0.04	0.13	1,186
Vendor	0.04	0.03	0.93	0.40	0.01	0.01	180	180	0.01	18.0	18.0	—	756	756	0.01	0.10	0.05	787
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.42	0.36	0.45	5.37	0.00	0.00	864	864	0.00	86.3	86.3	—	900	900	0.04	0.03	1.51	911
Vendor	0.03	0.02	0.65	0.28	< 0.005	0.01	127	127	0.01	12.7	12.7	—	540	540	0.01	0.07	0.64	562
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.08	0.98	0.00	0.00	158	158	0.00	15.7	15.7	—	149	149	0.01	0.01	0.25	151
Vendor	0.01	< 0.005	0.12	0.05	< 0.005	< 0.005	23.2	23.2	< 0.005	2.32	2.32	—	89.4	89.4	< 0.005	0.01	0.11	93.1
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.43. Paving (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.96	0.96	11.6	63.6	0.08	0.17	—	0.17	0.17	—	0.17	—	9,064	9,064	0.37	0.07	—	9,095
Paving	14.3	14.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.96	0.96	11.6	63.6	0.08	0.17	—	0.17	0.17	—	0.17	—	9,064	9,064	0.37	0.07	—	9,095
Paving	14.3	14.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.69	0.69	8.28	45.4	0.06	0.12	—	0.12	0.12	—	0.12	—	6,474	6,474	0.26	0.05	—	6,496
Paving	10.2	10.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.13	1.51	8.29	0.01	0.02	—	0.02	0.02	—	0.02	—	1,072	1,072	0.04	0.01	—	1,076
Paving	1.86	1.86	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.60	0.55	0.51	9.73	0.00	0.00	1,226	1,226	0.00	122	122	—	1,360	1,360	0.05	0.04	4.46	1,379
Vendor	0.04	0.03	0.80	0.36	0.01	0.01	180	180	0.01	18.0	18.0	—	741	741	0.01	0.10	1.86	774
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.48	0.44	0.59	5.48	0.00	0.00	1,226	1,226	0.00	122	122	—	1,149	1,149	0.06	0.04	0.12	1,164
Vendor	0.04	0.03	0.88	0.37	0.01	0.01	180	180	0.01	18.0	18.0	—	742	742	0.01	0.10	0.05	773
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.37	0.34	0.42	4.96	0.00	0.00	864	864	0.00	86.3	86.3	—	882	882	0.04	0.03	1.38	894
Vendor	0.03	0.02	0.62	0.26	< 0.005	0.01	127	127	0.01	12.7	12.7	—	530	530	0.01	0.07	0.57	552

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.08	0.91	0.00	0.00	158	158	0.00	15.7	15.7	—	146	146	0.01	0.01	0.23	148
Vendor	< 0.005	< 0.005	0.11	0.05	< 0.005	< 0.005	23.2	23.2	< 0.005	2.32	2.32	—	87.7	87.7	< 0.005	0.01	0.09	91.4
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.45. Paving (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.96	0.96	11.6	63.6	0.08	0.17	—	0.17	0.17	—	0.17	—	9,067	9,067	0.37	0.07	—	9,098
Paving	14.3	14.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.96	0.96	11.6	63.6	0.08	0.17	—	0.17	0.17	—	0.17	—	9,067	9,067	0.37	0.07	—	9,098
Paving	14.3	14.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.69	0.69	8.28	45.4	0.06	0.12	—	0.12	0.12	—	0.12	—	6,476	6,476	0.26	0.05	—	6,498
Paving	10.2	10.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.13	1.51	8.29	0.01	0.02	—	0.02	0.02	—	0.02	—	1,072	1,072	0.04	0.01	—	1,076
Paving	1.86	1.86	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.57	0.52	0.47	8.82	0.00	0.00	1,226	1,226	0.00	122	122	—	1,336	1,336	0.05	0.04	4.06	1,355
Vendor	0.04	0.03	0.77	0.34	0.01	0.01	180	180	0.01	18.0	18.0	—	726	726	0.01	0.10	1.62	758
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.43	0.38	0.55	4.93	0.00	0.00	1,226	1,226	0.00	122	122	—	1,130	1,130	0.06	0.04	0.10	1,144
Vendor	0.03	0.03	0.84	0.34	0.01	0.01	180	180	0.01	18.0	18.0	—	727	727	0.01	0.10	0.04	757
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.35	0.32	0.36	4.47	0.00	0.00	864	864	0.00	86.3	86.3	—	867	867	0.04	0.03	1.25	879
Vendor	0.03	0.02	0.59	0.24	< 0.005	0.01	127	127	0.01	12.7	12.7	—	519	519	0.01	0.07	0.50	541
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.06	0.06	0.07	0.82	0.00	0.00	158	158	0.00	15.7	15.7	—	144	144	0.01	0.01	0.21	145
Vendor	< 0.005	< 0.005	0.11	0.04	< 0.005	< 0.005	23.2	23.2	< 0.005	2.32	2.32	—	85.9	85.9	< 0.005	0.01	0.08	89.6
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.47. Paving (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.96	0.96	11.6	63.6	0.08	0.17	—	0.17	0.17	—	0.17	—	9,066	9,066	0.37	0.07	—	9,097
Paving	14.3	14.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.96	0.96	11.6	63.6	0.08	0.17	—	0.17	0.17	—	0.17	—	9,066	9,066	0.37	0.07	—	9,097
Paving	14.3	14.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.69	0.69	8.31	45.6	0.06	0.12	—	0.12	0.12	—	0.12	—	6,494	6,494	0.26	0.05	—	6,516

Paving	10.2	10.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.13	1.52	8.31	0.01	0.02	—	0.02	0.02	—	0.02	—	1,075	1,075	0.04	0.01	—	1,079
Paving	1.86	1.86	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.54	0.46	0.43	8.18	0.00	0.00	1,226	1,226	0.00	122	122	—	1,311	1,311	0.05	0.04	3.68	1,329
Vendor	0.03	0.02	0.74	0.31	0.01	0.01	180	180	0.01	18.0	18.0	—	708	708	0.01	0.10	1.39	738
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.41	0.37	0.51	4.58	0.00	0.00	1,226	1,226	0.00	122	122	—	1,109	1,109	0.02	0.04	0.10	1,122
Vendor	0.03	0.02	0.81	0.32	0.01	0.01	180	180	0.01	18.0	18.0	—	708	708	0.01	0.10	0.04	737
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.31	0.28	0.33	4.16	0.00	0.00	866	866	0.00	86.5	86.5	—	853	853	0.04	0.03	1.14	865
Vendor	0.02	0.02	0.57	0.23	< 0.005	0.01	127	127	0.01	12.7	12.7	—	507	507	0.01	0.07	0.43	528
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.06	0.76	0.00	0.00	158	158	0.00	15.8	15.8	—	141	141	0.01	0.01	0.19	143
Vendor	< 0.005	< 0.005	0.10	0.04	< 0.005	< 0.005	23.3	23.3	< 0.005	2.32	2.33	—	84.0	84.0	< 0.005	0.01	0.07	87.5

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.49. Paving (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.96	0.96	11.6	63.6	0.08	0.17	—	0.17	0.17	—	0.17	—	9,064	9,064	0.37	0.07	—	9,095
Paving	14.3	14.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.96	0.96	11.6	63.6	0.08	0.17	—	0.17	0.17	—	0.17	—	9,064	9,064	0.37	0.07	—	9,095
Paving	14.3	14.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.69	0.69	8.28	45.4	0.06	0.12	—	0.12	0.12	—	0.12	—	6,474	6,474	0.26	0.05	—	6,496
Paving	10.2	10.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.13	1.51	8.29	0.01	0.02	—	0.02	0.02	—	0.02	—	1,072	1,072	0.04	0.01	—	1,076
Paving	1.86	1.86	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.48	0.43	0.39	7.54	0.00	0.00	1,226	1,226	0.00	122	122	—	1,287	1,287	0.05	0.04	3.32	1,305
Vendor	0.03	0.02	0.71	0.29	0.01	0.01	180	180	0.01	18.0	18.0	—	688	688	0.01	0.10	1.18	718
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.39	0.35	0.43	4.22	0.00	0.00	1,226	1,226	0.00	122	122	—	1,089	1,089	0.02	0.04	0.09	1,102
Vendor	0.03	0.02	0.77	0.30	0.01	0.01	180	180	0.01	18.0	18.0	—	689	689	0.01	0.10	0.03	718
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.30	0.27	0.30	3.85	0.00	0.00	864	864	0.00	86.3	86.3	—	836	836	0.01	0.03	1.02	846
Vendor	0.02	0.01	0.54	0.21	< 0.005	0.01	127	127	0.01	12.7	12.7	—	492	492	0.01	0.07	0.36	513
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.06	0.70	0.00	0.00	158	158	0.00	15.7	15.7	—	138	138	< 0.005	0.01	0.17	140
Vendor	< 0.005	< 0.005	0.10	0.04	< 0.005	< 0.005	23.2	23.2	< 0.005	2.32	2.32	—	81.4	81.4	< 0.005	0.01	0.06	84.9
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.51. Architectural Coating (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.13	3.88	5.78	0.01	0.01	—	0.01	0.01	—	0.01	—	801	801	0.03	0.01	—	804
Architectural Coatings	132	132	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.13	3.88	5.78	0.01	0.01	—	0.01	0.01	—	0.01	—	801	801	0.03	0.01	—	804
Architectural Coatings	132	132	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.09	2.77	4.13	0.01	0.01	—	0.01	0.01	—	0.01	—	572	572	0.02	< 0.005	—	574

Architect Coatings	94.2	94.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.51	0.75	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	94.7	94.7	< 0.005	< 0.005	—	95.1
Architectural Coatings	17.2	17.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	9.22	8.11	7.62	145	0.00	0.00	16,835	16,835	0.00	1,681	1,681	—	19,041	19,041	0.75	0.61	67.1	19,309
Vendor	0.04	0.03	0.84	0.39	0.01	0.01	180	180	0.01	18.0	18.0	—	755	755	0.01	0.10	2.08	788
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	7.00	6.34	9.13	81.9	0.00	0.00	16,835	16,835	0.00	1,681	1,681	—	16,084	16,084	0.80	0.61	1.74	16,289
Vendor	0.04	0.03	0.93	0.40	0.01	0.01	180	180	0.01	18.0	18.0	—	756	756	0.01	0.10	0.05	787
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.71	4.90	6.12	73.8	0.00	0.00	11,867	11,867	0.00	1,185	1,185	—	12,353	12,353	0.54	0.44	20.7	12,518
Vendor	0.03	0.02	0.65	0.28	< 0.005	0.01	127	127	0.01	12.7	12.7	—	540	540	0.01	0.07	0.64	562
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	1.04	0.89	1.12	13.5	0.00	0.00	2,166	2,166	0.00	216	216	—	2,045	2,045	0.09	0.07	3.43	2,072
Vendor	0.01	< 0.005	0.12	0.05	< 0.005	< 0.005	23.2	23.2	< 0.005	2.32	2.32	—	89.4	89.4	< 0.005	0.01	0.11	93.1
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.53. Architectural Coating (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.13	3.88	5.78	0.01	0.01	—	0.01	0.01	—	0.01	—	801	801	0.03	0.01	—	804
Architectural Coatings	132	132	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.13	3.88	5.78	0.01	0.01	—	0.01	0.01	—	0.01	—	801	801	0.03	0.01	—	804
Architectural Coatings	132	132	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.09	2.77	4.13	0.01	0.01	—	0.01	0.01	—	0.01	—	572	572	0.02	< 0.005	—	574
Architectural Coatings	94.2	94.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.51	0.75	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	94.7	94.7	< 0.005	< 0.005	—	95.1
Architectural Coatings	17.2	17.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	8.23	7.62	7.06	134	0.00	0.00	16,835	16,835	0.00	1,681	1,681	—	18,674	18,674	0.72	0.61	61.3	18,936
Vendor	0.04	0.03	0.80	0.36	0.01	0.01	180	180	0.01	18.0	18.0	—	741	741	0.01	0.10	1.86	774
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	6.65	6.01	8.07	75.3	0.00	0.00	16,835	16,835	0.00	1,681	1,681	—	15,781	15,781	0.78	0.61	1.59	15,985
Vendor	0.04	0.03	0.88	0.37	0.01	0.01	180	180	0.01	18.0	18.0	—	742	742	0.01	0.10	0.05	773

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.06	4.62	5.72	68.1	0.00	0.00	11,867	11,867	0.00	1,185	1,185	—	12,119	12,119	0.54	0.44	18.9	12,281
Vendor	0.03	0.02	0.62	0.26	< 0.005	0.01	127	127	0.01	12.7	12.7	—	530	530	0.01	0.07	0.57	552
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.92	0.84	1.04	12.4	0.00	0.00	2,166	2,166	0.00	216	216	—	2,006	2,006	0.09	0.07	3.13	2,033
Vendor	< 0.005	< 0.005	0.11	0.05	< 0.005	< 0.005	23.2	23.2	< 0.005	2.32	2.32	—	87.7	87.7	< 0.005	0.01	0.09	91.4
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.55. Architectural Coating (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.13	3.88	5.78	0.01	0.01	—	0.01	0.01	—	0.01	—	801	801	0.03	0.01	—	804
Architectural Coatings	132	132	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.13	0.13	3.88	5.78	0.01	0.01	—	0.01	0.01	—	0.01	—	801	801	0.03	0.01	—	804
Architectural Coatings	132	132	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.09	2.77	4.13	0.01	0.01	—	0.01	0.01	—	0.01	—	572	572	0.02	< 0.005	—	574
Architectural Coatings	94.2	94.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.51	0.75	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	94.7	94.7	< 0.005	< 0.005	—	95.1
Architectural Coatings	17.2	17.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	7.79	7.21	6.50	121	0.00	0.00	16,835	16,835	0.00	1,681	1,681	—	18,349	18,349	0.72	0.61	55.7	18,605

Vendor	0.04	0.03	0.77	0.34	0.01	0.01	180	180	0.01	18.0	18.0	—	726	726	0.01	0.10	1.62	758
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.87	5.26	7.51	67.8	0.00	0.00	16,835	16,835	0.00	1,681	1,681	—	15,513	15,513	0.78	0.61	1.44	15,716
Vendor	0.03	0.03	0.84	0.34	0.01	0.01	180	180	0.01	18.0	18.0	—	727	727	0.01	0.10	0.04	757
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.85	4.41	4.96	61.4	0.00	0.00	11,867	11,867	0.00	1,185	1,185	—	11,910	11,910	0.52	0.42	17.2	12,065
Vendor	0.03	0.02	0.59	0.24	< 0.005	0.01	127	127	0.01	12.7	12.7	—	519	519	0.01	0.07	0.50	541
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.88	0.80	0.91	11.2	0.00	0.00	2,166	2,166	0.00	216	216	—	1,972	1,972	0.09	0.07	2.85	1,998
Vendor	< 0.005	< 0.005	0.11	0.04	< 0.005	< 0.005	23.2	23.2	< 0.005	2.32	2.32	—	85.9	85.9	< 0.005	0.01	0.08	89.6
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.57. Architectural Coating (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.13	3.88	5.78	0.01	0.01	—	0.01	0.01	—	0.01	—	801	801	0.03	0.01	—	804

Architectural Coatings	132	132	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.13	3.88	5.78	0.01	0.01	—	0.01	0.01	—	0.01	—	801	801	0.03	0.01	—	804
Architectural Coatings	132	132	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.09	2.78	4.14	0.01	0.01	—	0.01	0.01	—	0.01	—	574	574	0.02	< 0.005	—	576
Architectural Coatings	94.4	94.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.51	0.76	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	95.0	95.0	< 0.005	< 0.005	—	95.3

Architectural Coating	17.2	17.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	7.44	6.35	5.94	112	0.00	0.00	16,835	16,835	0.00	1,681	1,681	—	18,002	18,002	0.69	0.61	50.5	18,252
Vendor	0.03	0.02	0.74	0.31	0.01	0.01	180	180	0.01	18.0	18.0	—	708	708	0.01	0.10	1.39	738
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.63	5.01	6.95	62.9	0.00	0.00	16,835	16,835	0.00	1,681	1,681	—	15,225	15,225	0.25	0.61	1.31	15,415
Vendor	0.03	0.02	0.81	0.32	0.01	0.01	180	180	0.01	18.0	18.0	—	708	708	0.01	0.10	0.04	737
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.30	3.88	4.58	57.1	0.00	0.00	11,900	11,900	0.00	1,188	1,188	—	11,720	11,720	0.52	0.42	15.6	11,873
Vendor	0.02	0.02	0.57	0.23	< 0.005	0.01	127	127	0.01	12.7	12.7	—	507	507	0.01	0.07	0.43	528
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.79	0.71	0.84	10.4	0.00	0.00	2,172	2,172	0.00	217	217	—	1,940	1,940	0.09	0.07	2.59	1,966
Vendor	< 0.005	< 0.005	0.10	0.04	< 0.005	< 0.005	23.3	23.3	< 0.005	2.32	2.33	—	84.0	84.0	< 0.005	0.01	0.07	87.5
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.59. Architectural Coating (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.13	3.88	5.78	0.01	0.01	—	0.01	0.01	—	0.01	—	801	801	0.03	0.01	—	804
Architectural Coatings	132	132	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.13	3.88	5.78	0.01	0.01	—	0.01	0.01	—	0.01	—	801	801	0.03	0.01	—	804
Architectural Coatings	132	132	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.09	2.77	4.13	0.01	0.01	—	0.01	0.01	—	0.01	—	572	572	0.02	< 0.005	—	574
Architectural Coatings	94.2	94.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.51	0.75	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	94.7	94.7	< 0.005	< 0.005	—	95.1
Architectural Coatings	17.2	17.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	6.55	5.97	5.38	104	0.00	0.00	16,835	16,835	0.00	1,681	1,681	—	17,670	17,670	0.69	0.61	45.6	17,916
Vendor	0.03	0.02	0.71	0.29	0.01	0.01	180	180	0.01	18.0	18.0	—	688	688	0.01	0.10	1.18	718
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.41	4.80	5.89	58.0	0.00	0.00	16,835	16,835	0.00	1,681	1,681	—	14,952	14,952	0.22	0.59	1.18	15,133
Vendor	0.03	0.02	0.77	0.30	0.01	0.01	180	180	0.01	18.0	18.0	—	689	689	0.01	0.10	0.03	718
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.08	3.66	4.17	52.8	0.00	0.00	11,867	11,867	0.00	1,185	1,185	—	11,476	11,476	0.14	0.42	14.1	11,618
Vendor	0.02	0.01	0.54	0.21	< 0.005	0.01	127	127	0.01	12.7	12.7	—	492	492	0.01	0.07	0.36	513
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.74	0.67	0.76	9.64	0.00	0.00	2,166	2,166	0.00	216	216	—	1,900	1,900	0.02	0.07	2.33	1,923

Vendor	< 0.005	< 0.005	0.10	0.04	< 0.005	< 0.005	23.2	23.2	< 0.005	2.32	2.32	—	81.4	81.4	< 0.005	0.01	0.06	84.9
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	1/1/2025	12/31/2029	5.00	1,304	—
Site Preparation	Site Preparation	1/1/2025	12/31/2029	5.00	1,304	—
Grading	Grading	1/1/2025	12/31/2029	5.00	1,304	—
Building Construction	Building Construction	1/1/2025	12/31/2029	5.00	1,304	—
Paving	Paving	1/1/2025	12/31/2029	5.00	1,304	—
Architectural Coating	Architectural Coating	1/1/2025	12/31/2029	5.00	1,304	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

Demolition	Rubber Tired Dozers	Diesel	Tier 4 Final	12.0	8.00	367	0.40
Demolition	Excavators	Diesel	Tier 4 Final	18.0	8.00	36.0	0.38
Demolition	Concrete/Industrial Saws	Diesel	Tier 4 Final	6.00	8.00	33.0	0.73
Site Preparation	Rubber Tired Dozers	Diesel	Tier 4 Final	18.0	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	24.0	8.00	84.0	0.37
Grading	Graders	Diesel	Tier 4 Final	6.00	8.00	148	0.41
Grading	Excavators	Diesel	Tier 4 Final	12.0	8.00	36.0	0.38
Grading	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	12.0	8.00	84.0	0.37
Grading	Scrapers	Diesel	Tier 4 Final	12.0	8.00	423	0.48
Grading	Rubber Tired Dozers	Diesel	Tier 4 Final	6.00	8.00	367	0.40
Building Construction	Forklifts	Diesel	Tier 4 Final	18.0	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Tier 4 Final	6.00	8.00	25.0	0.74
Building Construction	Cranes	Diesel	Tier 4 Final	6.00	7.00	367	0.29
Building Construction	Welders	Diesel	Tier 4 Final	6.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	18.0	7.00	84.0	0.37
Paving	Pavers	Diesel	Tier 4 Final	12.0	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Tier 4 Final	12.0	8.00	89.0	0.36
Paving	Rollers	Diesel	Tier 4 Final	12.0	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Tier 4 Final	6.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	90.0	18.5	LDA,LDT1,LDT2

Demolition	Vendor	24.0	10.2	HHDT,MHDT
Demolition	Hauling	2.00	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	108	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	24.0	10.2	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	120	18.5	LDA,LDT1,LDT2
Grading	Vendor	24.0	10.2	HHDT,MHDT
Grading	Hauling	48.0	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	6,168	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	2,418	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	90.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	24.0	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	1,236	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	24.0	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Control Strategies Applied	PM10 Reduction	PM2.5 Reduction
Water unpaved roads twice daily	74%	74%
Limit vehicle speeds on unpaved roads to 25 mph	44%	44%
Sweep paved roads once per month	9%	9%

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00	0.00	18,538,584	6,179,528	—

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (Building Square Footage)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	50,000	—
Site Preparation	—	—	11,736	0.00	—
Grading	250,000	250,000	23,472	0.00	—
Paving	0.00	0.00	0.00	0.00	7,097

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	3	74%	74%
Water Demolished Area	2	36%	36%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
General Heavy Industry	795	100%
General Office Building	361	100%
General Heavy Industry	1,025	100%
General Heavy Industry	3,124	100%
Manufacturing	794	100%
Manufacturing	996	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2025	0.00	457	0.03	< 0.005
2026	0.00	457	0.03	< 0.005
2027	0.00	457	0.03	< 0.005
2028	0.00	457	0.03	< 0.005
2029	0.00	457	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	32.8	annual days of extreme heat
Extreme Precipitation	0.00	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.19	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	11.6
AQ-PM	19.1
AQ-DPM	9.09
Drinking Water	30.6
Lead Risk Housing	50.8
Pesticides	90.5
Toxic Releases	7.58
Traffic	3.06
Effect Indicators	—
CleanUp Sites	74.2
Groundwater	77.9
Haz Waste Facilities/Generators	93.2
Impaired Water Bodies	100.0
Solid Waste	86.5
Sensitive Population	—
Asthma	87.6
Cardio-vascular	83.2
Low Birth Weights	26.9
Socioeconomic Factor Indicators	—

Education	82.7
Housing	51.4
Linguistic	88.8
Poverty	94.9
Unemployment	99.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	16.66880534
Employed	7.173104068
Median HI	5.299627871
Education	—
Bachelor's or higher	5.017323239
High school enrollment	16.8741178
Preschool enrollment	68.89516233
Transportation	—
Auto Access	18.40112922
Active commuting	51.10997049
Social	—
2-parent households	13.28114975
Voting	16.79712563
Neighborhood	—
Alcohol availability	70.25535737
Park access	33.85089183
Retail density	4.311561658
Supermarket access	49.58295907

Tree canopy	0.782753753
Housing	—
Homeownership	38.3036058
Housing habitability	30.96368536
Low-inc homeowner severe housing cost burden	26.76761196
Low-inc renter severe housing cost burden	52.89362248
Uncrowded housing	38.58591043
Health Outcomes	—
Insured adults	21.00603105
Arthritis	0.0
Asthma ER Admissions	30.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	41.7
Cognitively Disabled	50.3
Physically Disabled	19.5
Heart Attack ER Admissions	46.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	54.3
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—

Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	14.1
Elderly	42.0
English Speaking	18.7
Foreign-born	65.3
Outdoor Workers	5.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	85.8
Traffic Density	4.9
Traffic Access	23.0
Other Indices	—
Hardship	92.9
Other Decision Support	—
2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	82.0
Healthy Places Index Score for Project Location (b)	11.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Construction: Construction Phases	Land use data are based applicant-provided buildout assumptions. Phase 1 (2025-2029) represents 50% of 10-year buildout.
Construction: Off-Road Equipment	Equipment increased based on scaler per buildout methodology.
Construction: Trips and VMT	Trips increased based on scaler per buildout methodology.
Construction: On-Road Fugitive Dust	85% paved roads assumed, according to ICAPCD guidance. PM reductions altered based on dust control plan implementation strategies (watering unpaved roads three times per day).
Construction: Paving	Paved area acreages calculated based on buildout estimates. Conservatively assumed 100% asphalt.
Land Use	Land use info based on applicant-provided buildout.

Lithium Valley SP Construction - Phase 1 (2030-2034) Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Lithium Valley SP Construction - Phase 1 (2030-2034)
Construction Start Date	1/1/2030
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	4.80
Location	33.18829759139308, -115.6026869228474
County	Imperial
City	Unincorporated
Air District	Imperial County APCD
Air Basin	Salton Sea
TAZ	5600
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
General Heavy Industry	25.0	1000sqft	0.57	25,000	2,500	—	—	—

General Office Building	266	1000sqft	6.12	266,397	26,659	—	—	—
General Heavy Industry	756	1000sqft	17.3	755,681	75,568	—	—	—
General Heavy Industry	9,923	1000sqft	173	7,541,382	754,154	—	—	—
Manufacturing	1,498	1000sqft	34.4	1,498,069	149,803	—	—	—
Manufacturing	2,273	1000sqft	52.2	2,272,527	227,253	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	201	196	207	1,290	1.69	3.39	126,251	126,254	3.39	12,624	12,628	—	300,030	300,030	6.70	14.7	368	304,949
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	190	189	218	1,025	1.69	3.39	126,251	126,254	3.39	12,624	12,628	—	283,269	283,269	7.05	14.7	9.53	287,838
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	140	136	154	798	1.21	2.43	89,238	89,241	2.43	8,924	8,926	—	207,235	207,235	4.91	10.5	113	210,601
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	25.5	24.9	28.1	146	0.22	0.44	16,286	16,286	0.44	1,629	1,629	—	34,310	34,310	0.81	1.74	18.8	34,867

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2030	201	196	207	1,290	1.69	3.39	126,251	126,254	3.39	12,624	12,628	—	300,030	300,030	6.70	14.7	368	304,949
2031	198	194	201	1,244	1.69	3.39	126,251	126,254	3.39	12,624	12,628	—	295,979	295,979	6.70	14.7	323	300,845
2032	193	192	196	1,204	1.69	3.39	126,251	126,254	3.39	12,624	12,628	—	292,234	292,234	6.70	14.1	281	296,888
2033	192	187	190	1,168	1.69	3.39	126,251	126,254	3.39	12,624	12,628	—	288,805	288,805	6.47	10.9	243	292,460
2034	189	185	188	1,133	1.69	3.39	126,251	126,254	3.39	12,624	12,628	—	285,532	285,532	5.90	10.9	210	289,139
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2030	190	189	218	1,025	1.69	3.39	126,251	126,254	3.39	12,624	12,628	—	283,269	283,269	7.05	14.7	9.53	287,838
2031	189	187	211	997	1.69	3.39	126,251	126,254	3.39	12,624	12,628	—	279,541	279,541	6.87	14.7	8.37	284,097
2032	187	183	205	976	1.69	3.39	126,251	126,254	3.39	12,624	12,628	—	276,079	276,079	6.87	14.1	7.28	280,463
2033	186	182	200	956	1.69	3.39	126,251	126,254	3.39	12,624	12,628	—	272,905	272,905	6.70	14.1	6.32	277,278
2034	185	180	194	936	1.69	3.39	126,251	126,254	3.39	12,624	12,628	—	269,873	269,873	6.13	14.1	5.43	274,231
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2030	140	136	154	798	1.21	2.42	88,994	88,997	2.42	8,899	8,902	—	207,235	207,235	4.91	10.5	113	210,601
2031	136	135	150	773	1.21	2.42	88,994	88,997	2.42	8,899	8,902	—	204,478	204,478	4.79	10.5	99.3	207,822
2032	135	132	146	754	1.21	2.43	89,238	89,241	2.43	8,924	8,926	—	202,479	202,479	4.80	10.1	86.8	205,698
2033	134	131	142	736	1.21	2.42	88,994	88,997	2.42	8,899	8,902	—	199,582	199,582	4.79	10.1	75.1	202,776
2034	133	130	138	717	1.21	2.42	88,994	88,997	2.42	8,899	8,902	—	197,347	197,347	4.22	10.1	64.7	200,516
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2030	25.5	24.9	28.1	146	0.22	0.44	16,241	16,242	0.44	1,624	1,625	—	34,310	34,310	0.81	1.74	18.8	34,867
2031	24.8	24.6	27.3	141	0.22	0.44	16,241	16,242	0.44	1,624	1,625	—	33,854	33,854	0.79	1.74	16.4	34,407
2032	24.7	24.1	26.6	138	0.22	0.44	16,286	16,286	0.44	1,629	1,629	—	33,523	33,523	0.79	1.67	14.4	34,056

2033	24.5	23.9	25.8	134	0.22	0.44	16,241	16,242	0.44	1,624	1,625	—	33,043	33,043	0.79	1.67	12.4	33,572
2034	24.3	23.7	25.1	131	0.22	0.44	16,241	16,242	0.44	1,624	1,625	—	32,673	32,673	0.70	1.67	10.7	33,198

3. Construction Emissions Details

3.1. Demolition (2030) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.17	2.17	27.0	109	0.20	0.38	—	0.38	0.38	—	0.38	—	20,558	20,558	0.83	0.17	—	20,628
Demolition	—	—	—	—	—	—	0.03	0.03	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.17	2.17	27.0	109	0.20	0.38	—	0.38	0.38	—	0.38	—	20,558	20,558	0.83	0.17	—	20,628
Demolition	—	—	—	—	—	—	0.03	0.03	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	1.55	1.55	19.3	77.9	0.14	0.27	—	0.27	0.27	—	0.27	—	14,684	14,684	0.60	0.12	—	14,735
Demolition	—	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.28	0.28	3.52	14.2	0.03	0.05	—	0.05	0.05	—	0.05	—	2,431	2,431	0.10	0.02	—	2,439
Demolition	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.46	0.41	0.35	6.98	0.00	0.00	1,226	1,226	0.00	122	122	—	1,264	1,264	0.01	0.04	2.98	1,280
Vendor	0.03	0.02	0.67	0.28	0.01	0.01	180	180	0.01	18.0	18.0	—	668	668	0.01	0.09	0.99	696
Hauling	< 0.005	< 0.005	0.13	0.03	< 0.005	< 0.005	29.5	29.5	< 0.005	2.94	2.95	—	120	120	< 0.005	0.02	0.20	126
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.34	0.33	0.39	3.91	0.00	0.00	1,226	1,226	0.00	122	122	—	1,070	1,070	0.02	0.04	0.08	1,083
Vendor	0.03	0.02	0.74	0.29	0.01	0.01	180	180	0.01	18.0	18.0	—	669	669	0.01	0.09	0.03	696
Hauling	< 0.005	< 0.005	0.15	0.04	< 0.005	< 0.005	29.5	29.5	< 0.005	2.94	2.95	—	120	120	< 0.005	0.02	0.01	126
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.28	0.25	0.28	3.55	0.00	0.00	864	864	0.00	86.3	86.3	—	821	821	0.01	0.03	0.92	831
Vendor	0.02	0.01	0.52	0.20	< 0.005	0.01	127	127	0.01	12.7	12.7	—	478	478	0.01	0.06	0.30	497
Hauling	< 0.005	< 0.005	0.10	0.03	< 0.005	< 0.005	20.8	20.8	< 0.005	2.08	2.08	—	85.8	85.8	< 0.005	0.01	0.06	90.0

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.05	0.65	0.00	0.00	158	158	0.00	15.7	15.7	—	136	136	< 0.005	0.01	0.15	138
Vendor	< 0.005	< 0.005	0.09	0.04	< 0.005	< 0.005	23.2	23.2	< 0.005	2.32	2.32	—	79.1	79.1	< 0.005	0.01	0.05	82.3
Hauling	< 0.005	< 0.005	0.02	< 0.005	< 0.005	< 0.005	3.79	3.79	< 0.005	0.38	0.38	—	14.2	14.2	< 0.005	< 0.005	0.01	14.9

3.3. Demolition (2031) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.17	2.17	27.0	109	0.20	0.38	—	0.38	0.38	—	0.38	—	20,556	20,556	0.83	0.17	—	20,627
Demolition	—	—	—	—	—	—	0.03	0.03	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.17	2.17	27.0	109	0.20	0.38	—	0.38	0.38	—	0.38	—	20,556	20,556	0.83	0.17	—	20,627
Demolition	—	—	—	—	—	—	0.03	0.03	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	1.55	1.55	19.3	77.9	0.14	0.27	—	0.27	0.27	—	0.27	—	14,683	14,683	0.60	0.12	—	14,733
Demolition	—	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.28	0.28	3.52	14.2	0.03	0.05	—	0.05	0.05	—	0.05	—	2,431	2,431	0.10	0.02	—	2,439
Demolition	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.43	0.39	0.31	6.45	0.00	0.00	1,226	1,226	0.00	122	122	—	1,243	1,243	0.01	0.04	2.67	1,259
Vendor	0.03	0.02	0.65	0.27	0.01	0.01	180	180	0.01	18.0	18.0	—	648	648	0.01	0.09	0.82	676
Hauling	< 0.005	< 0.005	0.13	0.03	< 0.005	< 0.005	29.5	29.5	< 0.005	2.94	2.95	—	117	117	< 0.005	0.02	0.19	123
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.32	0.32	0.35	3.60	0.00	0.00	1,226	1,226	0.00	122	122	—	1,053	1,053	0.01	0.04	0.07	1,066
Vendor	0.03	0.02	0.71	0.28	0.01	0.01	180	180	0.01	18.0	18.0	—	649	649	0.01	0.09	0.02	676
Hauling	< 0.005	< 0.005	0.14	0.04	< 0.005	< 0.005	29.5	29.5	< 0.005	2.94	2.95	—	117	117	< 0.005	0.02	< 0.005	123
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.24	0.24	0.25	3.28	0.00	0.00	864	864	0.00	86.3	86.3	—	808	808	0.01	0.03	0.82	818
Vendor	0.02	0.01	0.50	0.19	< 0.005	0.01	127	127	0.01	12.7	12.7	—	463	463	0.01	0.06	0.25	483
Hauling	< 0.005	< 0.005	0.10	0.02	< 0.005	< 0.005	20.8	20.8	< 0.005	2.08	2.08	—	83.7	83.7	< 0.005	0.01	0.06	87.7

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.05	0.60	0.00	0.00	158	158	0.00	15.7	15.7	—	134	134	< 0.005	0.01	0.14	135
Vendor	< 0.005	< 0.005	0.09	0.04	< 0.005	< 0.005	23.2	23.2	< 0.005	2.32	2.32	—	76.7	76.7	< 0.005	0.01	0.04	79.9
Hauling	< 0.005	< 0.005	0.02	< 0.005	< 0.005	< 0.005	3.79	3.79	< 0.005	0.38	0.38	—	13.9	13.9	< 0.005	< 0.005	0.01	14.5

3.5. Demolition (2032) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.17	2.17	27.0	109	0.20	0.38	—	0.38	0.38	—	0.38	—	20,559	20,559	0.83	0.17	—	20,629
Demolition	—	—	—	—	—	—	0.03	0.03	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.17	2.17	27.0	109	0.20	0.38	—	0.38	0.38	—	0.38	—	20,559	20,559	0.83	0.17	—	20,629
Demolition	—	—	—	—	—	—	0.03	0.03	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	1.56	1.56	19.4	78.1	0.14	0.27	—	0.27	0.27	—	0.27	—	14,725	14,725	0.60	0.12	—	14,776
Demolition	—	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.28	0.28	3.53	14.3	0.03	0.05	—	0.05	0.05	—	0.05	—	2,438	2,438	0.10	0.02	—	2,446
Demolition	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.37	0.37	0.27	6.01	0.00	0.00	1,226	1,226	0.00	122	122	—	1,224	1,224	0.01	0.04	2.37	1,240
Vendor	0.03	0.02	0.63	0.26	0.01	0.01	180	180	0.01	18.0	18.0	—	629	629	0.01	0.09	0.67	655
Hauling	< 0.005	< 0.005	0.13	0.03	< 0.005	< 0.005	29.5	29.5	< 0.005	2.94	2.95	—	114	114	< 0.005	0.02	0.17	120
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.31	0.26	0.31	3.37	0.00	0.00	1,226	1,226	0.00	122	122	—	1,037	1,037	0.01	0.04	0.06	1,050
Vendor	0.03	0.02	0.69	0.27	0.01	0.01	180	180	0.01	18.0	18.0	—	629	629	0.01	0.09	0.02	655
Hauling	< 0.005	< 0.005	0.14	0.04	< 0.005	< 0.005	29.5	29.5	< 0.005	2.94	2.95	—	115	115	< 0.005	0.02	< 0.005	120
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.23	0.20	0.22	3.05	0.00	0.00	866	866	0.00	86.5	86.5	—	798	798	0.01	0.03	0.73	808
Vendor	0.02	0.01	0.48	0.19	< 0.005	0.01	127	127	0.01	12.7	12.7	—	450	450	0.01	0.06	0.21	469
Hauling	< 0.005	< 0.005	0.10	0.02	< 0.005	< 0.005	20.8	20.8	< 0.005	2.08	2.08	—	82.0	82.0	< 0.005	0.01	0.05	86.0

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.04	0.56	0.00	0.00	158	158	0.00	15.8	15.8	—	132	132	< 0.005	0.01	0.12	134
Vendor	< 0.005	< 0.005	0.09	0.03	< 0.005	< 0.005	23.3	23.3	< 0.005	2.32	2.33	—	74.6	74.6	< 0.005	0.01	0.03	77.6
Hauling	< 0.005	< 0.005	0.02	< 0.005	< 0.005	< 0.005	3.80	3.80	< 0.005	0.38	0.38	—	13.6	13.6	< 0.005	< 0.005	0.01	14.2

3.7. Demolition (2033) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.17	2.17	27.0	109	0.20	0.38	—	0.38	0.38	—	0.38	—	20,559	20,559	0.83	0.17	—	20,630
Demolition	—	—	—	—	—	—	0.03	0.03	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.17	2.17	27.0	109	0.20	0.38	—	0.38	0.38	—	0.38	—	20,559	20,559	0.83	0.17	—	20,630
Demolition	—	—	—	—	—	—	0.03	0.03	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	1.55	1.55	19.3	77.9	0.14	0.27	—	0.27	0.27	—	0.27	—	14,685	14,685	0.60	0.12	—	14,735
Demolition	—	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.28	0.28	3.52	14.2	0.03	0.05	—	0.05	0.05	—	0.05	—	2,431	2,431	0.10	0.02	—	2,440
Demolition	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.35	0.31	0.23	5.61	0.00	0.00	1,226	1,226	0.00	122	122	—	1,207	1,207	0.01	0.01	2.10	1,211
Vendor	0.03	0.02	0.61	0.25	0.01	0.01	180	180	0.01	18.0	18.0	—	611	611	0.01	0.09	0.54	637
Hauling	< 0.005	< 0.005	0.13	0.03	< 0.005	< 0.005	29.5	29.5	< 0.005	2.94	2.95	—	112	112	< 0.005	0.02	0.15	117
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.29	0.25	0.27	3.14	0.00	0.00	1,226	1,226	0.00	122	122	—	1,023	1,023	0.01	0.04	0.05	1,036
Vendor	0.03	0.02	0.67	0.27	0.01	0.01	180	180	0.01	18.0	18.0	—	611	611	0.01	0.09	0.01	637
Hauling	< 0.005	< 0.005	0.14	0.03	< 0.005	< 0.005	29.5	29.5	< 0.005	2.94	2.95	—	112	112	< 0.005	0.02	< 0.005	117
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.22	0.19	0.19	2.86	0.00	0.00	864	864	0.00	86.3	86.3	—	785	785	0.01	0.03	0.65	795
Vendor	0.02	0.01	0.47	0.18	< 0.005	0.01	127	127	0.01	12.7	12.7	—	436	436	0.01	0.06	0.17	455
Hauling	< 0.005	< 0.005	0.10	0.02	< 0.005	< 0.005	20.8	20.8	< 0.005	2.08	2.08	—	80.1	80.1	< 0.005	0.01	0.05	83.9

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.52	0.00	0.00	158	158	0.00	15.7	15.7	—	130	130	< 0.005	0.01	0.11	132
Vendor	< 0.005	< 0.005	0.09	0.03	< 0.005	< 0.005	23.2	23.2	< 0.005	2.32	2.32	—	72.3	72.3	< 0.005	0.01	0.03	75.3
Hauling	< 0.005	< 0.005	0.02	< 0.005	< 0.005	< 0.005	3.79	3.79	< 0.005	0.38	0.38	—	13.3	13.3	< 0.005	< 0.005	0.01	13.9

3.9. Demolition (2034) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.17	2.17	27.0	109	0.20	0.38	—	0.38	0.38	—	0.38	—	20,558	20,558	0.83	0.17	—	20,629
Demolition	—	—	—	—	—	—	0.03	0.03	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.17	2.17	27.0	109	0.20	0.38	—	0.38	0.38	—	0.38	—	20,558	20,558	0.83	0.17	—	20,629
Demolition	—	—	—	—	—	—	0.03	0.03	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	1.55	1.55	19.3	77.9	0.14	0.27	—	0.27	0.27	—	0.27	—	14,685	14,685	0.60	0.12	—	14,735
Demolition	—	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.28	0.28	3.52	14.2	0.03	0.05	—	0.05	0.05	—	0.05	—	2,431	2,431	0.10	0.02	—	2,440
Demolition	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.33	0.29	0.23	5.20	0.00	0.00	1,226	1,226	0.00	122	122	—	1,191	1,191	0.01	0.01	1.85	1,195
Vendor	0.03	0.02	0.59	0.25	0.01	0.01	180	180	0.01	18.0	18.0	—	593	593	< 0.005	0.09	0.43	619
Hauling	< 0.005	< 0.005	0.12	0.03	< 0.005	< 0.005	29.5	29.5	< 0.005	2.94	2.95	—	110	110	< 0.005	0.02	0.13	115
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.28	0.24	0.23	2.92	0.00	0.00	1,226	1,226	0.00	122	122	—	1,010	1,010	0.01	0.04	0.05	1,023
Vendor	0.03	0.02	0.65	0.26	0.01	0.01	180	180	0.01	18.0	18.0	—	594	594	< 0.005	0.09	0.01	620
Hauling	< 0.005	< 0.005	0.14	0.03	< 0.005	< 0.005	29.5	29.5	< 0.005	2.94	2.95	—	110	110	< 0.005	0.02	< 0.005	115
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.21	0.18	0.16	2.65	0.00	0.00	864	864	0.00	86.3	86.3	—	774	774	0.01	0.03	0.57	784
Vendor	0.02	0.01	0.46	0.18	< 0.005	0.01	127	127	0.01	12.7	12.7	—	424	424	< 0.005	0.06	0.13	442
Hauling	< 0.005	< 0.005	0.10	0.02	< 0.005	< 0.005	20.8	20.8	< 0.005	2.08	2.08	—	78.7	78.7	< 0.005	0.01	0.04	82.4

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.03	0.48	0.00	0.00	158	158	0.00	15.7	15.7	—	128	128	< 0.005	0.01	0.09	130
Vendor	< 0.005	< 0.005	0.08	0.03	< 0.005	< 0.005	23.2	23.2	< 0.005	2.32	2.32	—	70.2	70.2	< 0.005	0.01	0.02	73.3
Hauling	< 0.005	< 0.005	0.02	< 0.005	< 0.005	< 0.005	3.79	3.79	< 0.005	0.38	0.38	—	13.0	13.0	< 0.005	< 0.005	0.01	13.7

3.11. Site Preparation (2030) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.99	2.99	15.5	170	0.29	0.60	—	0.60	0.60	—	0.60	—	31,774	31,774	1.29	0.26	—	31,883
Dust From Material Movement	—	—	—	—	—	—	30.7	30.7	—	15.8	15.8	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.99	2.99	15.5	170	0.29	0.60	—	0.60	0.60	—	0.60	—	31,774	31,774	1.29	0.26	—	31,883
Dust From Material Movement	—	—	—	—	—	—	30.7	30.7	—	15.8	15.8	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.13	2.13	11.1	121	0.21	0.43	—	0.43	0.43	—	0.43	—	22,696	22,696	0.92	0.18	—	22,774
Dust From Material Movement	—	—	—	—	—	—	21.9	21.9	—	11.3	11.3	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.39	0.39	2.03	22.1	0.04	0.08	—	0.08	0.08	—	0.08	—	3,758	3,758	0.15	0.03	—	3,770
Dust From Material Movement	—	—	—	—	—	—	4.00	4.00	—	2.05	2.05	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.55	0.50	0.42	8.37	0.00	0.00	1,471	1,471	0.00	147	147	—	1,517	1,517	0.01	0.05	3.58	1,536
Vendor	0.03	0.02	0.67	0.28	0.01	0.01	180	180	0.01	18.0	18.0	—	668	668	0.01	0.09	0.99	696
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.41	0.40	0.47	4.69	0.00	0.00	1,471	1,471	0.00	147	147	—	1,284	1,284	0.02	0.05	0.09	1,300
Vendor	0.03	0.02	0.74	0.29	0.01	0.01	180	180	0.01	18.0	18.0	—	669	669	0.01	0.09	0.03	696

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.34	0.30	0.33	4.26	0.00	0.00	1,037	1,037	0.00	104	104	—	985	985	0.01	0.04	1.10	998
Vendor	0.02	0.01	0.52	0.20	< 0.005	0.01	127	127	0.01	12.7	12.7	—	478	478	0.01	0.06	0.30	497
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.06	0.78	0.00	0.00	189	189	0.00	18.9	18.9	—	163	163	< 0.005	0.01	0.18	165
Vendor	< 0.005	< 0.005	0.09	0.04	< 0.005	< 0.005	23.2	23.2	< 0.005	2.32	2.32	—	79.1	79.1	< 0.005	0.01	0.05	82.3
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Site Preparation (2031) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.99	2.99	15.5	170	0.29	0.60	—	0.60	0.60	—	0.60	—	31,774	31,774	1.29	0.26	—	31,883
Dust From Material Movement	—	—	—	—	—	—	30.7	30.7	—	15.8	15.8	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	2.99	2.99	15.5	170	0.29	0.60	—	0.60	0.60	—	0.60	—	31,774	31,774	1.29	0.26	—	31,883
Dust From Material Movement	—	—	—	—	—	—	30.7	30.7	—	15.8	15.8	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.13	2.13	11.1	121	0.21	0.43	—	0.43	0.43	—	0.43	—	22,696	22,696	0.92	0.18	—	22,774
Dust From Material Movement	—	—	—	—	—	—	21.9	21.9	—	11.3	11.3	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.39	0.39	2.03	22.1	0.04	0.08	—	0.08	0.08	—	0.08	—	3,758	3,758	0.15	0.03	—	3,770
Dust From Material Movement	—	—	—	—	—	—	4.00	4.00	—	2.05	2.05	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.51	0.46	0.38	7.74	0.00	0.00	1,471	1,471	0.00	147	147	—	1,492	1,492	0.01	0.05	3.20	1,510

Vendor	0.03	0.02	0.65	0.27	0.01	0.01	180	180	0.01	18.0	18.0	—	648	648	0.01	0.09	0.82	676
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.39	0.38	0.42	4.32	0.00	0.00	1,471	1,471	0.00	147	147	—	1,263	1,263	0.02	0.05	0.08	1,279
Vendor	0.03	0.02	0.71	0.28	0.01	0.01	180	180	0.01	18.0	18.0	—	649	649	0.01	0.09	0.02	676
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.29	0.29	0.30	3.94	0.00	0.00	1,037	1,037	0.00	104	104	—	969	969	0.01	0.04	0.99	981
Vendor	0.02	0.01	0.50	0.19	< 0.005	0.01	127	127	0.01	12.7	12.7	—	463	463	0.01	0.06	0.25	483
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.05	0.72	0.00	0.00	189	189	0.00	18.9	18.9	—	160	160	< 0.005	0.01	0.16	162
Vendor	< 0.005	< 0.005	0.09	0.04	< 0.005	< 0.005	23.2	23.2	< 0.005	2.32	2.32	—	76.7	76.7	< 0.005	0.01	0.04	79.9
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.15. Site Preparation (2032) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.99	2.99	15.5	170	0.29	0.60	—	0.60	0.60	—	0.60	—	31,776	31,776	1.29	0.26	—	31,885

Dust From Material Movement	—	—	—	—	—	—	30.7	30.7	—	15.8	15.8	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.99	2.99	15.5	170	0.29	0.60	—	0.60	0.60	—	0.60	—	31,776	31,776	1.29	0.26	—	31,885
Dust From Material Movement	—	—	—	—	—	—	30.7	30.7	—	15.8	15.8	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.14	2.14	11.1	122	0.21	0.43	—	0.43	0.43	—	0.43	—	22,759	22,759	0.92	0.18	—	22,837
Dust From Material Movement	—	—	—	—	—	—	22.0	22.0	—	11.3	11.3	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.39	0.39	2.03	22.2	0.04	0.08	—	0.08	0.08	—	0.08	—	3,768	3,768	0.15	0.03	—	3,781

Dust From Material Movement	—	—	—	—	—	—	4.01	4.01	—	2.06	2.06	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.44	0.44	0.33	7.21	0.00	0.00	1,471	1,471	0.00	147	147	—	1,469	1,469	0.01	0.05	2.85	1,487
Vendor	0.03	0.02	0.63	0.26	0.01	0.01	180	180	0.01	18.0	18.0	—	629	629	0.01	0.09	0.67	655
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.37	0.32	0.37	4.04	0.00	0.00	1,471	1,471	0.00	147	147	—	1,245	1,245	0.02	0.05	0.07	1,260
Vendor	0.03	0.02	0.69	0.27	0.01	0.01	180	180	0.01	18.0	18.0	—	629	629	0.01	0.09	0.02	655
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.28	0.24	0.26	3.66	0.00	0.00	1,040	1,040	0.00	104	104	—	957	957	0.01	0.04	0.88	969
Vendor	0.02	0.01	0.48	0.19	< 0.005	0.01	127	127	0.01	12.7	12.7	—	450	450	0.01	0.06	0.21	469
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.05	0.67	0.00	0.00	190	190	0.00	18.9	18.9	—	159	159	< 0.005	0.01	0.15	161
Vendor	< 0.005	< 0.005	0.09	0.03	< 0.005	< 0.005	23.3	23.3	< 0.005	2.32	2.33	—	74.6	74.6	< 0.005	0.01	0.03	77.6
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.17. Site Preparation (2033) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.99	2.99	15.5	170	0.29	0.60	—	0.60	0.60	—	0.60	—	31,776	31,776	1.29	0.26	—	31,885
Dust From Material Movement	—	—	—	—	—	—	30.7	30.7	—	15.8	15.8	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.99	2.99	15.5	170	0.29	0.60	—	0.60	0.60	—	0.60	—	31,776	31,776	1.29	0.26	—	31,885
Dust From Material Movement	—	—	—	—	—	—	30.7	30.7	—	15.8	15.8	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.13	2.13	11.1	121	0.21	0.43	—	0.43	0.43	—	0.43	—	22,697	22,697	0.92	0.18	—	22,775
Dust From Material Movement	—	—	—	—	—	—	21.9	21.9	—	11.3	11.3	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.39	0.39	2.03	22.1	0.04	0.08	—	0.08	0.08	—	0.08	—	3,758	3,758	0.15	0.03	—	3,771
Dust From Material Movement	—	—	—	—	—	—	4.00	4.00	—	2.05	2.05	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.42	0.37	0.28	6.73	0.00	0.00	1,471	1,471	0.00	147	147	—	1,449	1,449	0.01	0.01	2.52	1,453
Vendor	0.03	0.02	0.61	0.25	0.01	0.01	180	180	0.01	18.0	18.0	—	611	611	0.01	0.09	0.54	637
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.35	0.30	0.32	3.77	0.00	0.00	1,471	1,471	0.00	147	147	—	1,228	1,228	0.01	0.05	0.07	1,243
Vendor	0.03	0.02	0.67	0.27	0.01	0.01	180	180	0.01	18.0	18.0	—	611	611	0.01	0.09	0.01	637
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.27	0.23	0.23	3.43	0.00	0.00	1,037	1,037	0.00	104	104	—	942	942	0.01	0.04	0.78	954
Vendor	0.02	0.01	0.47	0.18	< 0.005	0.01	127	127	0.01	12.7	12.7	—	436	436	0.01	0.06	0.17	455
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.04	0.63	0.00	0.00	189	189	0.00	18.9	18.9	—	156	156	< 0.005	0.01	0.13	158

Vendor	< 0.005	< 0.005	0.09	0.03	< 0.005	< 0.005	23.2	23.2	< 0.005	2.32	2.32	—	72.3	72.3	< 0.005	0.01	0.03	75.3
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.19. Site Preparation (2034) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.99	2.99	15.5	170	0.29	0.60	—	0.60	0.60	—	0.60	—	31,776	31,776	1.29	0.26	—	31,885
Dust From Material Movement	—	—	—	—	—	—	30.7	30.7	—	15.8	15.8	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.99	2.99	15.5	170	0.29	0.60	—	0.60	0.60	—	0.60	—	31,776	31,776	1.29	0.26	—	31,885
Dust From Material Movement	—	—	—	—	—	—	30.7	30.7	—	15.8	15.8	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	2.13	2.13	11.1	121	0.21	0.43	—	0.43	0.43	—	0.43	—	22,697	22,697	0.92	0.18	—	22,775
Dust From Material Movement	—	—	—	—	—	—	21.9	21.9	—	11.3	11.3	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.39	0.39	2.03	22.1	0.04	0.08	—	0.08	0.08	—	0.08	—	3,758	3,758	0.15	0.03	—	3,771
Dust From Material Movement	—	—	—	—	—	—	4.00	4.00	—	2.05	2.05	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.39	0.34	0.28	6.24	0.00	0.00	1,471	1,471	0.00	147	147	—	1,429	1,429	0.01	0.01	2.22	1,434
Vendor	0.03	0.02	0.59	0.25	0.01	0.01	180	180	0.01	18.0	18.0	—	593	593	< 0.005	0.09	0.43	619
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.34	0.28	0.28	3.50	0.00	0.00	1,471	1,471	0.00	147	147	—	1,212	1,212	0.01	0.05	0.06	1,227
Vendor	0.03	0.02	0.65	0.26	0.01	0.01	180	180	0.01	18.0	18.0	—	594	594	< 0.005	0.09	0.01	620
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.25	0.22	0.19	3.18	0.00	0.00	1,037	1,037	0.00	104	104	—	929	929	0.01	0.04	0.68	941

Vendor	0.02	0.01	0.46	0.18	< 0.005	0.01	127	127	0.01	12.7	12.7	—	424	424	< 0.005	0.06	0.13	442
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.04	0.58	0.00	0.00	189	189	0.00	18.9	18.9	—	154	154	< 0.005	0.01	0.11	156
Vendor	< 0.005	< 0.005	0.08	0.03	< 0.005	< 0.005	23.2	23.2	< 0.005	2.32	2.32	—	70.2	70.2	< 0.005	0.01	0.02	73.3
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.21. Grading (2030) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.84	3.84	26.6	212	0.37	0.74	—	0.74	0.74	—	0.74	—	39,576	39,576	1.61	0.32	—	39,712
Dust From Material Movement	—	—	—	—	—	—	14.4	14.4	—	5.70	5.70	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.84	3.84	26.6	212	0.37	0.74	—	0.74	0.74	—	0.74	—	39,576	39,576	1.61	0.32	—	39,712

Dust From Material Movement	—	—	—	—	—	—	14.4	14.4	—	5.70	5.70	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.74	2.74	19.0	151	0.26	0.53	—	0.53	0.53	—	0.53	—	28,269	28,269	1.15	0.23	—	28,366
Dust From Material Movement	—	—	—	—	—	—	10.3	10.3	—	4.07	4.07	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	0.50	3.46	27.6	0.05	0.10	—	0.10	0.10	—	0.10	—	4,680	4,680	0.19	0.04	—	4,696
Dust From Material Movement	—	—	—	—	—	—	1.87	1.87	—	0.74	0.74	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.61	0.55	0.47	9.30	0.00	0.00	1,635	1,635	0.00	163	163	—	1,685	1,685	0.02	0.06	3.98	1,707
Vendor	0.03	0.02	0.67	0.28	0.01	0.01	180	180	0.01	18.0	18.0	—	668	668	0.01	0.09	0.99	696
Hauling	0.10	0.07	3.20	0.84	0.02	0.06	707	707	0.06	70.7	70.7	—	2,883	2,883	0.03	0.46	4.87	3,025

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.45	0.44	0.52	5.21	0.00	0.00	1,635	1,635	0.00	163	163	—	1,427	1,427	0.02	0.06	0.10	1,444
Vendor	0.03	0.02	0.74	0.29	0.01	0.01	180	180	0.01	18.0	18.0	—	669	669	0.01	0.09	0.03	696
Hauling	0.09	0.06	3.54	0.86	0.02	0.06	707	707	0.06	70.7	70.7	—	2,886	2,886	0.03	0.46	0.13	3,023
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.38	0.34	0.37	4.74	0.00	0.00	1,152	1,152	0.00	115	115	—	1,095	1,095	0.01	0.04	1.22	1,108
Vendor	0.02	0.01	0.52	0.20	< 0.005	0.01	127	127	0.01	12.7	12.7	—	478	478	0.01	0.06	0.30	497
Hauling	0.07	0.05	2.47	0.60	0.02	0.05	498	498	0.05	49.8	49.9	—	2,060	2,060	0.02	0.33	1.51	2,160
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.07	0.86	0.00	0.00	210	210	0.00	21.0	21.0	—	181	181	< 0.005	0.01	0.20	184
Vendor	< 0.005	< 0.005	0.09	0.04	< 0.005	< 0.005	23.2	23.2	< 0.005	2.32	2.32	—	79.1	79.1	< 0.005	0.01	0.05	82.3
Hauling	0.01	0.01	0.45	0.11	< 0.005	0.01	91.0	91.0	0.01	9.09	9.10	—	341	341	< 0.005	0.05	0.25	358

3.23. Grading (2031) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.84	3.84	26.6	212	0.37	0.74	—	0.74	0.74	—	0.74	—	39,576	39,576	1.61	0.32	—	39,712
Dust From Material Movement	—	—	—	—	—	—	14.4	14.4	—	5.70	5.70	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.84	3.84	26.6	212	0.37	0.74	—	0.74	0.74	—	0.74	—	39,576	39,576	1.61	0.32	—	39,712
Dust From Material Movement	—	—	—	—	—	—	14.4	14.4	—	5.70	5.70	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.74	2.74	19.0	151	0.26	0.53	—	0.53	0.53	—	0.53	—	28,269	28,269	1.15	0.23	—	28,366
Dust From Material Movement	—	—	—	—	—	—	10.3	10.3	—	4.07	4.07	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	0.50	3.46	27.6	0.05	0.10	—	0.10	0.10	—	0.10	—	4,680	4,680	0.19	0.04	—	4,696
Dust From Material Movement	—	—	—	—	—	—	1.87	1.87	—	0.74	0.74	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.57	0.52	0.42	8.60	0.00	0.00	1,635	1,635	0.00	163	163	—	1,657	1,657	0.02	0.06	3.56	1,678
Vendor	0.03	0.02	0.65	0.27	0.01	0.01	180	180	0.01	18.0	18.0	—	648	648	0.01	0.09	0.82	676
Hauling	0.10	0.07	3.14	0.82	0.02	0.06	707	707	0.06	70.7	70.7	—	2,811	2,811	0.03	0.44	4.45	2,947
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.43	0.42	0.46	4.80	0.00	0.00	1,635	1,635	0.00	163	163	—	1,404	1,404	0.02	0.06	0.09	1,421
Vendor	0.03	0.02	0.71	0.28	0.01	0.01	180	180	0.01	18.0	18.0	—	649	649	0.01	0.09	0.02	676
Hauling	0.09	0.06	3.45	0.84	0.02	0.06	707	707	0.06	70.7	70.7	—	2,814	2,814	0.03	0.44	0.12	2,945
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.33	0.32	0.33	4.38	0.00	0.00	1,152	1,152	0.00	115	115	—	1,077	1,077	0.01	0.04	1.09	1,090
Vendor	0.02	0.01	0.50	0.19	< 0.005	0.01	127	127	0.01	12.7	12.7	—	463	463	0.01	0.06	0.25	483
Hauling	0.07	0.05	2.42	0.59	0.02	0.05	498	498	0.05	49.8	49.9	—	2,009	2,009	0.02	0.31	1.37	2,104
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.06	0.80	0.00	0.00	210	210	0.00	21.0	21.0	—	178	178	< 0.005	0.01	0.18	181
Vendor	< 0.005	< 0.005	0.09	0.04	< 0.005	< 0.005	23.2	23.2	< 0.005	2.32	2.32	—	76.7	76.7	< 0.005	0.01	0.04	79.9
Hauling	0.01	0.01	0.44	0.11	< 0.005	0.01	91.0	91.0	0.01	9.09	9.10	—	333	333	< 0.005	0.05	0.23	348

3.25. Grading (2032) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	3.84	3.84	26.6	212	0.37	0.74	—	0.74	0.74	—	0.74	—	39,577	39,577	1.61	0.32	—	39,713
Dust From Material Movement	—	—	—	—	—	—	14.4	14.4	—	5.70	5.70	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.84	3.84	26.6	212	0.37	0.74	—	0.74	0.74	—	0.74	—	39,577	39,577	1.61	0.32	—	39,713
Dust From Material Movement	—	—	—	—	—	—	14.4	14.4	—	5.70	5.70	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.75	2.75	19.0	152	0.26	0.53	—	0.53	0.53	—	0.53	—	28,347	28,347	1.15	0.23	—	28,444
Dust From Material Movement	—	—	—	—	—	—	10.3	10.3	—	4.08	4.08	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	0.50	3.47	27.7	0.05	0.10	—	0.10	0.10	—	0.10	—	4,693	4,693	0.19	0.04	—	4,709

Dust From Material Movement	—	—	—	—	—	—	1.88	1.88	—	0.75	0.75	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.49	0.49	0.36	8.01	0.00	0.00	1,635	1,635	0.00	163	163	—	1,632	1,632	0.02	0.06	3.16	1,653
Vendor	0.03	0.02	0.63	0.26	0.01	0.01	180	180	0.01	18.0	18.0	—	629	629	0.01	0.09	0.67	655
Hauling	0.10	0.07	3.09	0.82	0.02	0.06	707	707	0.06	70.7	70.7	—	2,747	2,747	0.03	0.44	4.03	2,882
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.41	0.35	0.41	4.49	0.00	0.00	1,635	1,635	0.00	163	163	—	1,383	1,383	0.02	0.06	0.08	1,400
Vendor	0.03	0.02	0.69	0.27	0.01	0.01	180	180	0.01	18.0	18.0	—	629	629	0.01	0.09	0.02	655
Hauling	0.09	0.06	3.40	0.84	0.02	0.06	707	707	0.06	70.7	70.7	—	2,749	2,749	0.03	0.44	0.10	2,880
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.31	0.27	0.29	4.07	0.00	0.00	1,155	1,155	0.00	115	115	—	1,064	1,064	0.01	0.04	0.98	1,077
Vendor	0.02	0.01	0.48	0.19	< 0.005	0.01	127	127	0.01	12.7	12.7	—	450	450	0.01	0.06	0.21	469
Hauling	0.07	0.05	2.40	0.60	0.02	0.05	500	500	0.05	49.9	50.0	—	1,968	1,968	0.02	0.31	1.25	2,063
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.05	0.74	0.00	0.00	211	211	0.00	21.1	21.1	—	176	176	< 0.005	0.01	0.16	178
Vendor	< 0.005	< 0.005	0.09	0.03	< 0.005	< 0.005	23.3	23.3	< 0.005	2.32	2.33	—	74.6	74.6	< 0.005	0.01	0.03	77.6
Hauling	0.01	0.01	0.44	0.11	< 0.005	0.01	91.2	91.2	0.01	9.11	9.12	—	326	326	< 0.005	0.05	0.21	342

3.27. Grading (2033) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.84	3.84	26.6	212	0.37	0.74	—	0.74	0.74	—	0.74	—	39,577	39,577	1.61	0.32	—	39,713
Dust From Material Movement	—	—	—	—	—	—	14.4	14.4	—	5.70	5.70	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.84	3.84	26.6	212	0.37	0.74	—	0.74	0.74	—	0.74	—	39,577	39,577	1.61	0.32	—	39,713
Dust From Material Movement	—	—	—	—	—	—	14.4	14.4	—	5.70	5.70	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.74	2.74	19.0	151	0.26	0.53	—	0.53	0.53	—	0.53	—	28,269	28,269	1.15	0.23	—	28,366
Dust From Material Movement	—	—	—	—	—	—	10.3	10.3	—	4.07	4.07	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	0.50	3.46	27.6	0.05	0.10	—	0.10	0.10	—	0.10	—	4,680	4,680	0.19	0.04	—	4,696
Dust From Material Movement	—	—	—	—	—	—	1.87	1.87	—	0.74	0.74	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.47	0.41	0.31	7.47	0.00	0.00	1,635	1,635	0.00	163	163	—	1,609	1,609	0.01	0.01	2.80	1,615
Vendor	0.03	0.02	0.61	0.25	0.01	0.01	180	180	0.01	18.0	18.0	—	611	611	0.01	0.09	0.54	637
Hauling	0.10	0.07	3.04	0.81	0.02	0.06	707	707	0.06	70.7	70.7	—	2,691	2,691	0.03	0.42	3.63	2,819
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.39	0.33	0.36	4.19	0.00	0.00	1,635	1,635	0.00	163	163	—	1,364	1,364	0.02	0.06	0.07	1,381
Vendor	0.03	0.02	0.67	0.27	0.01	0.01	180	180	0.01	18.0	18.0	—	611	611	0.01	0.09	0.01	637
Hauling	0.09	0.06	3.33	0.83	0.02	0.06	707	707	0.06	70.7	70.7	—	2,694	2,694	0.03	0.42	0.09	2,818
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.30	0.26	0.26	3.82	0.00	0.00	1,152	1,152	0.00	115	115	—	1,046	1,046	0.01	0.04	0.86	1,059
Vendor	0.02	0.01	0.47	0.18	< 0.005	0.01	127	127	0.01	12.7	12.7	—	436	436	0.01	0.06	0.17	455
Hauling	0.07	0.05	2.34	0.58	0.02	0.05	498	498	0.05	49.8	49.9	—	1,923	1,923	0.02	0.30	1.12	2,013
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.05	0.70	0.00	0.00	210	210	0.00	21.0	21.0	—	173	173	< 0.005	0.01	0.14	175

Vendor	< 0.005	< 0.005	0.09	0.03	< 0.005	< 0.005	23.2	23.2	< 0.005	2.32	2.32	—	72.3	72.3	< 0.005	0.01	0.03	75.3
Hauling	0.01	0.01	0.43	0.11	< 0.005	0.01	91.0	91.0	0.01	9.09	9.10	—	318	318	< 0.005	0.05	0.19	333

3.29. Grading (2034) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.84	3.84	26.6	212	0.37	0.74	—	0.74	0.74	—	0.74	—	39,577	39,577	1.61	0.32	—	39,713
Dust From Material Movement	—	—	—	—	—	—	14.4	14.4	—	5.70	5.70	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.84	3.84	26.6	212	0.37	0.74	—	0.74	0.74	—	0.74	—	39,577	39,577	1.61	0.32	—	39,713
Dust From Material Movement	—	—	—	—	—	—	14.4	14.4	—	5.70	5.70	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	2.74	2.74	19.0	151	0.26	0.53	—	0.53	0.53	—	0.53	—	28,269	28,269	1.15	0.23	—	28,366
Dust From Material Movement	—	—	—	—	—	—	10.3	10.3	—	4.07	4.07	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.50	0.50	3.46	27.6	0.05	0.10	—	0.10	0.10	—	0.10	—	4,680	4,680	0.19	0.04	—	4,696
Dust From Material Movement	—	—	—	—	—	—	1.87	1.87	—	0.74	0.74	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.44	0.38	0.31	6.93	0.00	0.00	1,635	1,635	0.00	163	163	—	1,588	1,588	0.01	0.01	2.46	1,593
Vendor	0.03	0.02	0.59	0.25	0.01	0.01	180	180	0.01	18.0	18.0	—	593	593	< 0.005	0.09	0.43	619
Hauling	0.10	0.07	3.00	0.79	0.02	0.06	707	707	0.06	70.7	70.7	—	2,643	2,643	0.03	0.42	3.24	2,771
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.37	0.32	0.31	3.89	0.00	0.00	1,635	1,635	0.00	163	163	—	1,346	1,346	0.02	0.06	0.06	1,364
Vendor	0.03	0.02	0.65	0.26	0.01	0.01	180	180	0.01	18.0	18.0	—	594	594	< 0.005	0.09	0.01	620
Hauling	0.09	0.06	3.29	0.81	0.02	0.06	707	707	0.06	70.7	70.7	—	2,646	2,646	0.03	0.42	0.08	2,770
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.28	0.24	0.22	3.54	0.00	0.00	1,152	1,152	0.00	115	115	—	1,032	1,032	0.01	0.04	0.76	1,045

Vendor	0.02	0.01	0.46	0.18	< 0.005	0.01	127	127	0.01	12.7	12.7	—	424	424	< 0.005	0.06	0.13	442
Hauling	0.07	0.05	2.31	0.57	0.02	0.05	498	498	0.05	49.8	49.9	—	1,889	1,889	0.02	0.30	1.00	1,979
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.04	0.65	0.00	0.00	210	210	0.00	21.0	21.0	—	171	171	< 0.005	0.01	0.13	173
Vendor	< 0.005	< 0.005	0.08	0.03	< 0.005	< 0.005	23.2	23.2	< 0.005	2.32	2.32	—	70.2	70.2	< 0.005	0.01	0.02	73.3
Hauling	0.01	0.01	0.42	0.10	< 0.005	0.01	91.0	91.0	0.01	9.09	9.10	—	313	313	< 0.005	0.05	0.17	328

3.31. Building Construction (2030) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.56	1.56	17.6	93.8	0.15	0.28	—	0.28	0.28	—	0.28	—	14,871	14,871	0.60	0.12	—	14,922
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.56	1.56	17.6	93.8	0.15	0.28	—	0.28	0.28	—	0.28	—	14,871	14,871	0.60	0.12	—	14,922
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	1.11	1.11	12.5	67.0	0.10	0.20	—	0.20	0.20	—	0.20	—	10,622	10,622	0.43	0.09	—	10,658
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.20	0.20	2.29	12.2	0.02	0.04	—	0.04	0.04	—	0.04	—	1,759	1,759	0.07	0.01	—	1,765
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	31.2	28.3	24.1	478	0.00	0.00	84,013	84,013	0.00	8,389	8,389	—	86,624	86,624	0.82	2.92	204	87,720
Vendor	3.17	2.25	68.0	28.2	0.54	1.09	18,162	18,163	1.09	1,815	1,816	—	67,330	67,330	0.86	9.13	99.5	70,170
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	23.3	22.8	26.6	268	0.00	0.00	84,013	84,013	0.00	8,389	8,389	—	73,332	73,332	1.09	2.92	5.29	74,236
Vendor	2.90	1.93	74.5	29.4	0.54	1.09	18,162	18,163	1.09	1,815	1,816	—	67,397	67,397	0.86	9.13	2.57	70,141
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	19.4	17.3	18.9	243	0.00	0.00	59,221	59,221	0.00	5,913	5,913	—	56,272	56,272	0.68	2.09	63.0	56,975
Vendor	2.15	1.49	52.2	20.5	0.39	0.78	12,802	12,803	0.78	1,279	1,280	—	48,113	48,113	0.62	6.52	30.7	50,102
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.54	3.16	3.45	44.4	0.00	0.00	10,808	10,808	0.00	1,079	1,079	—	9,317	9,317	0.11	0.35	10.4	9,433

Vendor	0.39	0.27	9.52	3.74	0.07	0.14	2,336	2,337	0.14	233	234	—	7,966	7,966	0.10	1.08	5.08	8,295
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.33. Building Construction (2031) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.56	1.56	17.6	93.8	0.15	0.28	—	0.28	0.28	—	0.28	—	14,871	14,871	0.60	0.12	—	14,922
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.56	1.56	17.6	93.8	0.15	0.28	—	0.28	0.28	—	0.28	—	14,871	14,871	0.60	0.12	—	14,922
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.11	1.11	12.5	67.0	0.10	0.20	—	0.20	0.20	—	0.20	—	10,622	10,622	0.43	0.09	—	10,658
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.20	0.20	2.29	12.2	0.02	0.04	—	0.04	0.04	—	0.04	—	1,759	1,759	0.07	0.01	—	1,765
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	29.3	26.5	21.4	442	0.00	0.00	84,013	84,013	0.00	8,389	8,389	—	85,183	85,183	0.82	2.92	183	86,257
Vendor	3.11	2.20	65.5	27.0	0.54	1.09	18,162	18,163	1.09	1,815	1,816	—	65,283	65,283	0.86	9.13	82.4	68,106
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	22.2	21.8	23.8	247	0.00	0.00	84,013	84,013	0.00	8,389	8,389	—	72,144	72,144	0.95	2.92	4.75	73,043
Vendor	2.85	1.93	72.0	28.1	0.54	1.09	18,162	18,163	1.09	1,815	1,816	—	65,352	65,352	0.86	9.13	2.13	68,095
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	16.7	16.4	16.9	225	0.00	0.00	59,221	59,221	0.00	5,913	5,913	—	55,350	55,350	0.58	2.09	56.3	56,044
Vendor	2.11	1.45	50.4	19.5	0.39	0.78	12,802	12,803	0.78	1,279	1,280	—	46,651	46,651	0.62	6.52	25.3	48,635
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.05	3.00	3.08	41.1	0.00	0.00	10,808	10,808	0.00	1,079	1,079	—	9,164	9,164	0.10	0.35	9.32	9,279
Vendor	0.38	0.27	9.19	3.57	0.07	0.14	2,336	2,337	0.14	233	234	—	7,724	7,724	0.10	1.08	4.19	8,052
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.35. Building Construction (2032) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.56	1.56	17.6	93.8	0.15	0.28	—	0.28	0.28	—	0.28	—	14,871	14,871	0.60	0.12	—	14,922
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.56	1.56	17.6	93.8	0.15	0.28	—	0.28	0.28	—	0.28	—	14,871	14,871	0.60	0.12	—	14,922
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.12	1.12	12.6	67.2	0.10	0.20	—	0.20	0.20	—	0.20	—	10,651	10,651	0.43	0.09	—	10,687
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.20	0.20	2.30	12.3	0.02	0.04	—	0.04	0.04	—	0.04	—	1,763	1,763	0.07	0.01	—	1,769
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	25.3	25.0	18.6	412	0.00	0.00	84,013	84,013	0.00	8,389	8,389	—	83,896	83,896	0.82	2.92	163	84,950
Vendor	3.11	2.20	63.5	26.3	0.54	1.09	18,162	18,163	1.09	1,815	1,816	—	63,326	63,326	0.86	8.58	67.3	65,973
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	20.9	18.0	21.1	231	0.00	0.00	84,013	84,013	0.00	8,389	8,389	—	71,080	71,080	0.95	2.92	4.21	71,979
Vendor	2.85	1.93	69.5	27.4	0.54	1.09	18,162	18,163	1.09	1,815	1,816	—	63,397	63,397	0.86	8.58	1.75	65,978
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	15.8	13.7	15.0	209	0.00	0.00	59,383	59,383	0.00	5,929	5,929	—	54,678	54,678	0.58	2.09	50.2	55,367
Vendor	2.12	1.46	48.7	19.1	0.39	0.78	12,838	12,838	0.78	1,283	1,284	—	45,378	45,378	0.62	6.15	20.8	47,246
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.88	2.50	2.75	38.2	0.00	0.00	10,837	10,837	0.00	1,082	1,082	—	9,053	9,053	0.10	0.35	8.32	9,167
Vendor	0.39	0.27	8.89	3.49	0.07	0.14	2,343	2,343	0.14	234	234	—	7,513	7,513	0.10	1.02	3.45	7,822
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.37. Building Construction (2033) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.56	1.56	17.6	93.8	0.15	0.28	—	0.28	0.28	—	0.28	—	14,871	14,871	0.60	0.12	—	14,922

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.56	1.56	17.6	93.8	0.15	0.28	—	0.28	0.28	—	0.28	—	14,871	14,871	0.60	0.12	—	14,922
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.11	1.11	12.5	67.0	0.10	0.20	—	0.20	0.20	—	0.20	—	10,622	10,622	0.43	0.09	—	10,658
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.20	0.20	2.29	12.2	0.02	0.04	—	0.04	0.04	—	0.04	—	1,759	1,759	0.07	0.01	—	1,765
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	24.1	21.3	16.0	384	0.00	0.00	84,013	84,013	0.00	8,389	8,389	—	82,727	82,727	0.68	0.41	144	83,009
Vendor	3.11	2.14	61.6	25.6	0.54	1.09	18,162	18,163	1.09	1,815	1,816	—	61,525	61,525	0.81	8.58	54.6	64,157
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	20.1	17.2	18.5	215	0.00	0.00	84,013	84,013	0.00	8,389	8,389	—	70,111	70,111	0.82	2.92	3.74	71,007
Vendor	2.85	1.93	67.1	26.7	0.54	1.09	18,162	18,163	1.09	1,815	1,816	—	61,597	61,597	0.86	8.58	1.42	64,177
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	15.2	13.2	13.1	196	0.00	0.00	59,221	59,221	0.00	5,913	5,913	—	53,776	53,776	0.58	2.09	44.5	54,458
Vendor	2.11	1.45	47.2	18.6	0.39	0.78	12,802	12,803	0.78	1,279	1,280	—	43,968	43,968	0.62	6.13	16.8	45,827
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.78	2.40	2.39	35.8	0.00	0.00	10,808	10,808	0.00	1,079	1,079	—	8,903	8,903	0.10	0.35	7.36	9,016
Vendor	0.38	0.27	8.62	3.40	0.07	0.14	2,336	2,337	0.14	233	234	—	7,279	7,279	0.10	1.01	2.79	7,587
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.39. Building Construction (2034) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.56	1.56	17.6	93.8	0.15	0.28	—	0.28	0.28	—	0.28	—	14,871	14,871	0.60	0.12	—	14,922
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	1.56	1.56	17.6	93.8	0.15	0.28	—	0.28	0.28	—	0.28	—	14,871	14,871	0.60	0.12	—	14,922
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.11	1.11	12.5	67.0	0.10	0.20	—	0.20	0.20	—	0.20	—	10,622	10,622	0.43	0.09	—	10,658
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.20	0.20	2.29	12.2	0.02	0.04	—	0.04	0.04	—	0.04	—	1,759	1,759	0.07	0.01	—	1,765
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	22.4	19.6	15.8	356	0.00	0.00	84,013	84,013	0.00	8,389	8,389	—	81,616	81,616	0.68	0.41	127	81,882
Vendor	3.06	2.09	59.8	25.0	0.54	1.09	18,162	18,163	1.09	1,815	1,816	—	59,794	59,794	0.27	8.58	43.8	62,402
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	19.2	16.2	15.8	200	0.00	0.00	84,013	84,013	0.00	8,389	8,389	—	69,191	69,191	0.82	2.92	3.28	70,086
Vendor	2.85	1.93	65.3	26.1	0.54	1.09	18,162	18,163	1.09	1,815	1,816	—	59,866	59,866	0.32	8.58	1.14	62,433
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	14.4	12.3	11.1	182	0.00	0.00	59,221	59,221	0.00	5,913	5,913	—	53,064	53,064	0.49	2.09	39.1	53,737
Vendor	2.11	1.42	45.9	18.1	0.39	0.78	12,802	12,803	0.78	1,279	1,280	—	42,732	42,732	0.19	6.13	13.5	44,577
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.62	2.24	2.03	33.2	0.00	0.00	10,808	10,808	0.00	1,079	1,079	—	8,785	8,785	0.08	0.35	6.47	8,897
Vendor	0.38	0.26	8.38	3.31	0.07	0.14	2,336	2,337	0.14	233	234	—	7,075	7,075	0.03	1.01	2.23	7,380
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.41. Paving (2030) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.96	0.96	11.6	63.6	0.08	0.17	—	0.17	0.17	—	0.17	—	9,064	9,064	0.37	0.07	—	9,095
Paving	14.3	14.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.96	0.96	11.6	63.6	0.08	0.17	—	0.17	0.17	—	0.17	—	9,064	9,064	0.37	0.07	—	9,095
Paving	14.3	14.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.69	0.69	8.28	45.4	0.06	0.12	—	0.12	0.12	—	0.12	—	6,474	6,474	0.26	0.05	—	6,496
Paving	10.2	10.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.13	1.51	8.29	0.01	0.02	—	0.02	0.02	—	0.02	—	1,072	1,072	0.04	0.01	—	1,076
Paving	1.86	1.86	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.46	0.41	0.35	6.98	0.00	0.00	1,226	1,226	0.00	122	122	—	1,264	1,264	0.01	0.04	2.98	1,280
Vendor	0.03	0.02	0.67	0.28	0.01	0.01	180	180	0.01	18.0	18.0	—	668	668	0.01	0.09	0.99	696
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.34	0.33	0.39	3.91	0.00	0.00	1,226	1,226	0.00	122	122	—	1,070	1,070	0.02	0.04	0.08	1,083
Vendor	0.03	0.02	0.74	0.29	0.01	0.01	180	180	0.01	18.0	18.0	—	669	669	0.01	0.09	0.03	696
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.28	0.25	0.28	3.55	0.00	0.00	864	864	0.00	86.3	86.3	—	821	821	0.01	0.03	0.92	831
Vendor	0.02	0.01	0.52	0.20	< 0.005	0.01	127	127	0.01	12.7	12.7	—	478	478	0.01	0.06	0.30	497
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.05	0.65	0.00	0.00	158	158	0.00	15.7	15.7	—	136	136	< 0.005	0.01	0.15	138
Vendor	< 0.005	< 0.005	0.09	0.04	< 0.005	< 0.005	23.2	23.2	< 0.005	2.32	2.32	—	79.1	79.1	< 0.005	0.01	0.05	82.3
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.43. Paving (2031) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.96	0.96	11.6	63.6	0.08	0.17	—	0.17	0.17	—	0.17	—	9,064	9,064	0.37	0.07	—	9,095
Paving	14.3	14.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.96	0.96	11.6	63.6	0.08	0.17	—	0.17	0.17	—	0.17	—	9,064	9,064	0.37	0.07	—	9,095
Paving	14.3	14.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.69	0.69	8.28	45.4	0.06	0.12	—	0.12	0.12	—	0.12	—	6,474	6,474	0.26	0.05	—	6,496
Paving	10.2	10.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.13	1.51	8.29	0.01	0.02	—	0.02	0.02	—	0.02	—	1,072	1,072	0.04	0.01	—	1,076
Paving	1.86	1.86	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.43	0.39	0.31	6.45	0.00	0.00	1,226	1,226	0.00	122	122	—	1,243	1,243	0.01	0.04	2.67	1,259
Vendor	0.03	0.02	0.65	0.27	0.01	0.01	180	180	0.01	18.0	18.0	—	648	648	0.01	0.09	0.82	676
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.32	0.32	0.35	3.60	0.00	0.00	1,226	1,226	0.00	122	122	—	1,053	1,053	0.01	0.04	0.07	1,066
Vendor	0.03	0.02	0.71	0.28	0.01	0.01	180	180	0.01	18.0	18.0	—	649	649	0.01	0.09	0.02	676
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.24	0.24	0.25	3.28	0.00	0.00	864	864	0.00	86.3	86.3	—	808	808	0.01	0.03	0.82	818
Vendor	0.02	0.01	0.50	0.19	< 0.005	0.01	127	127	0.01	12.7	12.7	—	463	463	0.01	0.06	0.25	483

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.05	0.60	0.00	0.00	158	158	0.00	15.7	15.7	—	134	134	< 0.005	0.01	0.14	135
Vendor	< 0.005	< 0.005	0.09	0.04	< 0.005	< 0.005	23.2	23.2	< 0.005	2.32	2.32	—	76.7	76.7	< 0.005	0.01	0.04	79.9
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.45. Paving (2032) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.96	0.96	11.6	63.6	0.08	0.17	—	0.17	0.17	—	0.17	—	9,064	9,064	0.37	0.07	—	9,095
Paving	14.3	14.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.96	0.96	11.6	63.6	0.08	0.17	—	0.17	0.17	—	0.17	—	9,064	9,064	0.37	0.07	—	9,095
Paving	14.3	14.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.69	0.69	8.31	45.6	0.06	0.12	—	0.12	0.12	—	0.12	—	6,492	6,492	0.26	0.05	—	6,514
Paving	10.2	10.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.13	1.52	8.31	0.01	0.02	—	0.02	0.02	—	0.02	—	1,075	1,075	0.04	0.01	—	1,078
Paving	1.86	1.86	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.37	0.37	0.27	6.01	0.00	0.00	1,226	1,226	0.00	122	122	—	1,224	1,224	0.01	0.04	2.37	1,240
Vendor	0.03	0.02	0.63	0.26	0.01	0.01	180	180	0.01	18.0	18.0	—	629	629	0.01	0.09	0.67	655
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.31	0.26	0.31	3.37	0.00	0.00	1,226	1,226	0.00	122	122	—	1,037	1,037	0.01	0.04	0.06	1,050
Vendor	0.03	0.02	0.69	0.27	0.01	0.01	180	180	0.01	18.0	18.0	—	629	629	0.01	0.09	0.02	655
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.23	0.20	0.22	3.05	0.00	0.00	866	866	0.00	86.5	86.5	—	798	798	0.01	0.03	0.73	808
Vendor	0.02	0.01	0.48	0.19	< 0.005	0.01	127	127	0.01	12.7	12.7	—	450	450	0.01	0.06	0.21	469
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.04	0.04	0.04	0.56	0.00	0.00	158	158	0.00	15.8	15.8	—	132	132	< 0.005	0.01	0.12	134
Vendor	< 0.005	< 0.005	0.09	0.03	< 0.005	< 0.005	23.3	23.3	< 0.005	2.32	2.33	—	74.6	74.6	< 0.005	0.01	0.03	77.6
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.47. Paving (2033) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.96	0.96	11.6	63.6	0.08	0.17	—	0.17	0.17	—	0.17	—	9,064	9,064	0.37	0.07	—	9,095
Paving	14.3	14.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.96	0.96	11.6	63.6	0.08	0.17	—	0.17	0.17	—	0.17	—	9,064	9,064	0.37	0.07	—	9,095
Paving	14.3	14.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.69	0.69	8.28	45.4	0.06	0.12	—	0.12	0.12	—	0.12	—	6,474	6,474	0.26	0.05	—	6,496

Paving	10.2	10.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.13	1.51	8.29	0.01	0.02	—	0.02	0.02	—	0.02	—	1,072	1,072	0.04	0.01	—	1,076
Paving	1.86	1.86	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.35	0.31	0.23	5.61	0.00	0.00	1,226	1,226	0.00	122	122	—	1,207	1,207	0.01	0.01	2.10	1,211
Vendor	0.03	0.02	0.61	0.25	0.01	0.01	180	180	0.01	18.0	18.0	—	611	611	0.01	0.09	0.54	637
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.29	0.25	0.27	3.14	0.00	0.00	1,226	1,226	0.00	122	122	—	1,023	1,023	0.01	0.04	0.05	1,036
Vendor	0.03	0.02	0.67	0.27	0.01	0.01	180	180	0.01	18.0	18.0	—	611	611	0.01	0.09	0.01	637
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.22	0.19	0.19	2.86	0.00	0.00	864	864	0.00	86.3	86.3	—	785	785	0.01	0.03	0.65	795
Vendor	0.02	0.01	0.47	0.18	< 0.005	0.01	127	127	0.01	12.7	12.7	—	436	436	0.01	0.06	0.17	455
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.52	0.00	0.00	158	158	0.00	15.7	15.7	—	130	130	< 0.005	0.01	0.11	132
Vendor	< 0.005	< 0.005	0.09	0.03	< 0.005	< 0.005	23.2	23.2	< 0.005	2.32	2.32	—	72.3	72.3	< 0.005	0.01	0.03	75.3

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.49. Paving (2034) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.96	0.96	11.6	63.6	0.08	0.17	—	0.17	0.17	—	0.17	—	9,064	9,064	0.37	0.07	—	9,095
Paving	14.3	14.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.96	0.96	11.6	63.6	0.08	0.17	—	0.17	0.17	—	0.17	—	9,064	9,064	0.37	0.07	—	9,095
Paving	14.3	14.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.69	0.69	8.28	45.4	0.06	0.12	—	0.12	0.12	—	0.12	—	6,474	6,474	0.26	0.05	—	6,496
Paving	10.2	10.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.13	1.51	8.29	0.01	0.02	—	0.02	0.02	—	0.02	—	1,072	1,072	0.04	0.01	—	1,076
Paving	1.86	1.86	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.33	0.29	0.23	5.20	0.00	0.00	1,226	1,226	0.00	122	122	—	1,191	1,191	0.01	0.01	1.85	1,195
Vendor	0.03	0.02	0.59	0.25	0.01	0.01	180	180	0.01	18.0	18.0	—	593	593	< 0.005	0.09	0.43	619
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.28	0.24	0.23	2.92	0.00	0.00	1,226	1,226	0.00	122	122	—	1,010	1,010	0.01	0.04	0.05	1,023
Vendor	0.03	0.02	0.65	0.26	0.01	0.01	180	180	0.01	18.0	18.0	—	594	594	< 0.005	0.09	0.01	620
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.21	0.18	0.16	2.65	0.00	0.00	864	864	0.00	86.3	86.3	—	774	774	0.01	0.03	0.57	784
Vendor	0.02	0.01	0.46	0.18	< 0.005	0.01	127	127	0.01	12.7	12.7	—	424	424	< 0.005	0.06	0.13	442
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.03	0.48	0.00	0.00	158	158	0.00	15.7	15.7	—	128	128	< 0.005	0.01	0.09	130
Vendor	< 0.005	< 0.005	0.08	0.03	< 0.005	< 0.005	23.2	23.2	< 0.005	2.32	2.32	—	70.2	70.2	< 0.005	0.01	0.02	73.3
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.51. Architectural Coating (2030) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.13	3.88	5.78	0.01	0.01	—	0.01	0.01	—	0.01	—	801	801	0.03	0.01	—	804
Architectural Coatings	132	132	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.13	3.88	5.78	0.01	0.01	—	0.01	0.01	—	0.01	—	801	801	0.03	0.01	—	804
Architectural Coatings	132	132	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.09	2.77	4.13	0.01	0.01	—	0.01	0.01	—	0.01	—	572	572	0.02	< 0.005	—	574

Architect Coatings	94.2	94.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.51	0.75	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	94.7	94.7	< 0.005	< 0.005	—	95.1
Architectural Coatings	17.2	17.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	6.25	5.67	4.82	95.8	0.00	0.00	16,835	16,835	0.00	1,681	1,681	—	17,359	17,359	0.16	0.59	40.9	17,578
Vendor	0.03	0.02	0.67	0.28	0.01	0.01	180	180	0.01	18.0	18.0	—	668	668	0.01	0.09	0.99	696
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.66	4.58	5.33	53.7	0.00	0.00	16,835	16,835	0.00	1,681	1,681	—	14,695	14,695	0.22	0.59	1.06	14,876
Vendor	0.03	0.02	0.74	0.29	0.01	0.01	180	180	0.01	18.0	18.0	—	669	669	0.01	0.09	0.03	696
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.88	3.46	3.79	48.8	0.00	0.00	11,867	11,867	0.00	1,185	1,185	—	11,276	11,276	0.14	0.42	12.6	11,417
Vendor	0.02	0.01	0.52	0.20	< 0.005	0.01	127	127	0.01	12.7	12.7	—	478	478	0.01	0.06	0.30	497
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.71	0.63	0.69	8.90	0.00	0.00	2,166	2,166	0.00	216	216	—	1,867	1,867	0.02	0.07	2.09	1,890
Vendor	< 0.005	< 0.005	0.09	0.04	< 0.005	< 0.005	23.2	23.2	< 0.005	2.32	2.32	—	79.1	79.1	< 0.005	0.01	0.05	82.3
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.53. Architectural Coating (2031) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.13	3.88	5.78	0.01	0.01	—	0.01	0.01	—	0.01	—	801	801	0.03	0.01	—	804
Architectural Coatings	132	132	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.13	3.88	5.78	0.01	0.01	—	0.01	0.01	—	0.01	—	801	801	0.03	0.01	—	804
Architectural Coatings	132	132	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.09	2.77	4.13	0.01	0.01	—	0.01	0.01	—	0.01	—	572	572	0.02	< 0.005	—	574
Architectural Coatings	94.2	94.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.51	0.75	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	94.7	94.7	< 0.005	< 0.005	—	95.1
Architectural Coatings	17.2	17.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.87	5.31	4.29	88.6	0.00	0.00	16,835	16,835	0.00	1,681	1,681	—	17,070	17,070	0.16	0.59	36.6	17,285
Vendor	0.03	0.02	0.65	0.27	0.01	0.01	180	180	0.01	18.0	18.0	—	648	648	0.01	0.09	0.82	676
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.44	4.36	4.77	49.4	0.00	0.00	16,835	16,835	0.00	1,681	1,681	—	14,457	14,457	0.19	0.59	0.95	14,637
Vendor	0.03	0.02	0.71	0.28	0.01	0.01	180	180	0.01	18.0	18.0	—	649	649	0.01	0.09	0.02	676

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.35	3.29	3.39	45.1	0.00	0.00	11,867	11,867	0.00	1,185	1,185	—	11,092	11,092	0.12	0.42	11.3	11,231
Vendor	0.02	0.01	0.50	0.19	< 0.005	0.01	127	127	0.01	12.7	12.7	—	463	463	0.01	0.06	0.25	483
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.61	0.60	0.62	8.23	0.00	0.00	2,166	2,166	0.00	216	216	—	1,836	1,836	0.02	0.07	1.87	1,859
Vendor	< 0.005	< 0.005	0.09	0.04	< 0.005	< 0.005	23.2	23.2	< 0.005	2.32	2.32	—	76.7	76.7	< 0.005	0.01	0.04	79.9
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.55. Architectural Coating (2032) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.13	3.88	5.78	0.01	0.01	—	0.01	0.01	—	0.01	—	801	801	0.03	0.01	—	804
Architectural Coatings	132	132	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.13	0.13	3.88	5.78	0.01	0.01	—	0.01	0.01	—	0.01	—	801	801	0.03	0.01	—	804
Architectural Coatings	132	132	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.09	2.78	4.14	0.01	0.01	—	0.01	0.01	—	0.01	—	574	574	0.02	< 0.005	—	576
Architectural Coatings	94.4	94.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.51	0.76	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	95.0	95.0	< 0.005	< 0.005	—	95.3
Architectural Coatings	17.2	17.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.07	5.01	3.73	82.5	0.00	0.00	16,835	16,835	0.00	1,681	1,681	—	16,812	16,812	0.16	0.59	32.6	17,023

Vendor	0.03	0.02	0.63	0.26	0.01	0.01	180	180	0.01	18.0	18.0	—	629	629	0.01	0.09	0.67	655
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.20	3.61	4.24	46.2	0.00	0.00	16,835	16,835	0.00	1,681	1,681	—	14,244	14,244	0.19	0.59	0.84	14,424
Vendor	0.03	0.02	0.69	0.27	0.01	0.01	180	180	0.01	18.0	18.0	—	629	629	0.01	0.09	0.02	655
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.16	2.74	3.02	41.9	0.00	0.00	11,900	11,900	0.00	1,188	1,188	—	10,957	10,957	0.12	0.42	10.1	11,095
Vendor	0.02	0.01	0.48	0.19	< 0.005	0.01	127	127	0.01	12.7	12.7	—	450	450	0.01	0.06	0.21	469
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.58	0.50	0.55	7.65	0.00	0.00	2,172	2,172	0.00	217	217	—	1,814	1,814	0.02	0.07	1.67	1,837
Vendor	< 0.005	< 0.005	0.09	0.03	< 0.005	< 0.005	23.3	23.3	< 0.005	2.32	2.33	—	74.6	74.6	< 0.005	0.01	0.03	77.6
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.57. Architectural Coating (2033) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.13	3.88	5.78	0.01	0.01	—	0.01	0.01	—	0.01	—	801	801	0.03	0.01	—	804

Architectural Coatings	132	132	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.13	3.88	5.78	0.01	0.01	—	0.01	0.01	—	0.01	—	801	801	0.03	0.01	—	804
Architectural Coatings	132	132	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.09	2.77	4.13	0.01	0.01	—	0.01	0.01	—	0.01	—	572	572	0.02	< 0.005	—	574
Architectural Coatings	94.2	94.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.51	0.75	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	94.7	94.7	< 0.005	< 0.005	—	95.1

Architectural Coating	17.2	17.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.82	4.26	3.20	77.0	0.00	0.00	16,835	16,835	0.00	1,681	1,681	—	16,578	16,578	0.14	0.08	28.8	16,634
Vendor	0.03	0.02	0.61	0.25	0.01	0.01	180	180	0.01	18.0	18.0	—	611	611	0.01	0.09	0.54	637
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.03	3.45	3.71	43.1	0.00	0.00	16,835	16,835	0.00	1,681	1,681	—	14,050	14,050	0.16	0.59	0.75	14,229
Vendor	0.03	0.02	0.67	0.27	0.01	0.01	180	180	0.01	18.0	18.0	—	611	611	0.01	0.09	0.01	637
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.06	2.64	2.63	39.3	0.00	0.00	11,867	11,867	0.00	1,185	1,185	—	10,776	10,776	0.12	0.42	8.91	10,913
Vendor	0.02	0.01	0.47	0.18	< 0.005	0.01	127	127	0.01	12.7	12.7	—	436	436	0.01	0.06	0.17	455
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.56	0.48	0.48	7.17	0.00	0.00	2,166	2,166	0.00	216	216	—	1,784	1,784	0.02	0.07	1.47	1,807
Vendor	< 0.005	< 0.005	0.09	0.03	< 0.005	< 0.005	23.2	23.2	< 0.005	2.32	2.32	—	72.3	72.3	< 0.005	0.01	0.03	75.3
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.59. Architectural Coating (2034) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.13	3.88	5.78	0.01	0.01	—	0.01	0.01	—	0.01	—	801	801	0.03	0.01	—	804
Architectural Coatings	132	132	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.13	3.88	5.78	0.01	0.01	—	0.01	0.01	—	0.01	—	801	801	0.03	0.01	—	804
Architectural Coatings	132	132	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.09	2.77	4.13	0.01	0.01	—	0.01	0.01	—	0.01	—	572	572	0.02	< 0.005	—	574
Architectural Coatings	94.2	94.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.51	0.75	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	94.7	94.7	< 0.005	< 0.005	—	95.1
Architectural Coatings	17.2	17.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.50	3.94	3.17	71.4	0.00	0.00	16,835	16,835	0.00	1,681	1,681	—	16,355	16,355	0.14	0.08	25.4	16,408
Vendor	0.03	0.02	0.59	0.25	0.01	0.01	180	180	0.01	18.0	18.0	—	593	593	< 0.005	0.09	0.43	619
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.84	3.26	3.17	40.1	0.00	0.00	16,835	16,835	0.00	1,681	1,681	—	13,865	13,865	0.16	0.59	0.66	14,044
Vendor	0.03	0.02	0.65	0.26	0.01	0.01	180	180	0.01	18.0	18.0	—	594	594	< 0.005	0.09	0.01	620
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.88	2.46	2.23	36.4	0.00	0.00	11,867	11,867	0.00	1,185	1,185	—	10,633	10,633	0.10	0.42	7.83	10,768
Vendor	0.02	0.01	0.46	0.18	< 0.005	0.01	127	127	0.01	12.7	12.7	—	424	424	< 0.005	0.06	0.13	442
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.53	0.45	0.41	6.65	0.00	0.00	2,166	2,166	0.00	216	216	—	1,760	1,760	0.02	0.07	1.30	1,783

Vendor	< 0.005	< 0.005	0.08	0.03	< 0.005	< 0.005	23.2	23.2	< 0.005	2.32	2.32	—	70.2	70.2	< 0.005	0.01	0.02	73.3
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	1/1/2030	12/31/2034	5.00	1,304	—
Site Preparation	Site Preparation	1/1/2030	12/31/2034	5.00	1,304	—
Grading	Grading	1/1/2030	12/31/2034	5.00	1,304	—
Building Construction	Building Construction	1/1/2030	12/31/2034	5.00	1,304	—
Paving	Paving	1/1/2030	12/31/2034	5.00	1,304	—
Architectural Coating	Architectural Coating	1/1/2030	12/31/2034	5.00	1,304	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

Demolition	Rubber Tired Dozers	Diesel	Tier 4 Final	12.0	8.00	367	0.40
Demolition	Excavators	Diesel	Tier 4 Final	18.0	8.00	36.0	0.38
Demolition	Concrete/Industrial Saws	Diesel	Tier 4 Final	6.00	8.00	33.0	0.73
Site Preparation	Rubber Tired Dozers	Diesel	Tier 4 Final	18.0	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	24.0	8.00	84.0	0.37
Grading	Graders	Diesel	Tier 4 Final	6.00	8.00	148	0.41
Grading	Excavators	Diesel	Tier 4 Final	12.0	8.00	36.0	0.38
Grading	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	12.0	8.00	84.0	0.37
Grading	Scrapers	Diesel	Tier 4 Final	12.0	8.00	423	0.48
Grading	Rubber Tired Dozers	Diesel	Tier 4 Final	6.00	8.00	367	0.40
Building Construction	Forklifts	Diesel	Tier 4 Final	18.0	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Tier 4 Final	6.00	8.00	25.0	0.74
Building Construction	Cranes	Diesel	Tier 4 Final	6.00	7.00	367	0.29
Building Construction	Welders	Diesel	Tier 4 Final	6.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	18.0	7.00	84.0	0.37
Paving	Pavers	Diesel	Tier 4 Final	12.0	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Tier 4 Final	12.0	8.00	89.0	0.36
Paving	Rollers	Diesel	Tier 4 Final	12.0	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Tier 4 Final	6.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	90.0	18.5	LDA,LDT1,LDT2

Demolition	Vendor	24.0	10.2	HHDT,MHDT
Demolition	Hauling	2.00	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	108	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	24.0	10.2	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	120	18.5	LDA,LDT1,LDT2
Grading	Vendor	24.0	10.2	HHDT,MHDT
Grading	Hauling	48.0	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	6,168	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	2,418	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	90.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	24.0	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	1,236	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	24.0	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Control Strategies Applied	PM10 Reduction	PM2.5 Reduction
Water unpaved roads twice daily	74%	74%
Limit vehicle speeds on unpaved roads to 25 mph	44%	44%
Sweep paved roads once per month	9%	9%

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00	0.00	18,538,584	6,179,528	—

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (Building Square Footage)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	50,000	—
Site Preparation	—	—	11,736	0.00	—
Grading	250,000	250,000	23,472	0.00	—
Paving	0.00	0.00	0.00	0.00	7,097

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	3	74%	74%
Water Demolished Area	2	36%	36%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
General Heavy Industry	795	100%
General Office Building	361	100%
General Heavy Industry	1,025	100%
General Heavy Industry	3,124	100%
Manufacturing	794	100%
Manufacturing	996	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2030	0.00	457	0.03	< 0.005
2031	0.00	457	0.03	< 0.005
2032	0.00	457	0.03	< 0.005
2033	0.00	457	0.03	< 0.005
2034	0.00	457	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	32.8	annual days of extreme heat
Extreme Precipitation	0.00	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.19	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	11.6
AQ-PM	19.1
AQ-DPM	9.09
Drinking Water	30.6
Lead Risk Housing	50.8
Pesticides	90.5
Toxic Releases	7.58
Traffic	3.06
Effect Indicators	—
CleanUp Sites	74.2
Groundwater	77.9
Haz Waste Facilities/Generators	93.2
Impaired Water Bodies	100.0
Solid Waste	86.5
Sensitive Population	—
Asthma	87.6
Cardio-vascular	83.2
Low Birth Weights	26.9
Socioeconomic Factor Indicators	—

Education	82.7
Housing	51.4
Linguistic	88.8
Poverty	94.9
Unemployment	99.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	16.66880534
Employed	7.173104068
Median HI	5.299627871
Education	—
Bachelor's or higher	5.017323239
High school enrollment	16.8741178
Preschool enrollment	68.89516233
Transportation	—
Auto Access	18.40112922
Active commuting	51.10997049
Social	—
2-parent households	13.28114975
Voting	16.79712563
Neighborhood	—
Alcohol availability	70.25535737
Park access	33.85089183
Retail density	4.311561658
Supermarket access	49.58295907

Tree canopy	0.782753753
Housing	—
Homeownership	38.3036058
Housing habitability	30.96368536
Low-inc homeowner severe housing cost burden	26.76761196
Low-inc renter severe housing cost burden	52.89362248
Uncrowded housing	38.58591043
Health Outcomes	—
Insured adults	21.00603105
Arthritis	0.0
Asthma ER Admissions	30.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	41.7
Cognitively Disabled	50.3
Physically Disabled	19.5
Heart Attack ER Admissions	46.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	54.3
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—

Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	14.1
Elderly	42.0
English Speaking	18.7
Foreign-born	65.3
Outdoor Workers	5.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	85.8
Traffic Density	4.9
Traffic Access	23.0
Other Indices	—
Hardship	92.9
Other Decision Support	—
2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	82.0
Healthy Places Index Score for Project Location (b)	11.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Construction: Construction Phases	Land use data are based applicant-provided buildout assumptions. Phase 1 (2030-2034) represents 50% of 10-year buildout.
Construction: Off-Road Equipment	Equipment increased based on scaler per buildout methodology.
Construction: Trips and VMT	Trips increased based on scaler per buildout methodology.
Construction: On-Road Fugitive Dust	85% paved roads assumed, according to ICAPCD guidance. PM reductions altered based on dust control plan implementation strategies (watering unpaved roads three times per day).
Construction: Paving	Paved area acreages calculated based on buildout estimates. Conservatively assumed 100% asphalt.
Land Use	Land use info based on applicant-provided buildout.

Lithium Valley SP Construction - Phase 1 Floodway/Conservation Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Lithium Valley SP Construction - Phase 1 Floodway/Conservation
Construction Start Date	1/1/2025
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	4.80
Location	33.18829759139308, -115.6026869228474
County	Imperial
City	Unincorporated
Air District	Imperial County APCD
Air Basin	Salton Sea
TAZ	5600
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
City Park	9,182	Acre	9,182	0.00	0.00	0.00	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	11.5	11.2	60.2	546	0.89	1.82	4,681	4,683	1.82	490	492	—	101,851	101,851	4.07	1.20	22.1	102,331
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	10.9	10.7	60.8	530	0.89	1.82	4,681	4,683	1.82	490	492	—	101,126	101,126	4.08	1.20	0.57	101,585
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	7.98	7.76	43.3	383	0.64	1.30	3,310	3,311	1.30	347	348	—	72,445	72,445	2.91	0.85	6.81	72,779
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.46	1.42	7.91	69.8	0.12	0.24	604	604	0.24	63.3	63.5	—	11,994	11,994	0.48	0.14	1.13	12,049

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	11.5	11.2	60.2	546	0.89	1.82	4,681	4,683	1.82	490	492	—	101,851	101,851	4.07	1.20	22.1	102,331

2026	11.2	11.1	60.0	543	0.89	1.82	4,681	4,683	1.82	490	492	—	101,741	101,741	4.06	1.20	20.0	102,220
2027	11.1	11.0	59.8	540	0.89	1.82	4,681	4,683	1.82	490	492	—	101,616	101,616	4.06	1.19	18.0	102,092
2028	11.0	10.7	59.5	538	0.89	1.82	4,681	4,683	1.82	490	492	—	101,501	101,501	4.06	1.18	16.1	101,970
2029	10.8	10.6	59.3	535	0.89	1.82	4,681	4,683	1.82	490	492	—	101,319	101,319	4.05	1.18	14.4	101,786
2030	10.7	10.6	59.1	534	0.89	1.82	4,681	4,683	1.82	490	492	—	101,185	101,185	3.92	1.16	12.7	101,641
2031	10.6	10.5	58.9	532	0.89	1.82	4,681	4,683	1.82	490	492	—	101,060	101,060	3.92	1.16	11.2	101,514
2032	10.4	10.4	58.7	530	0.89	1.82	4,681	4,683	1.82	490	492	—	100,948	100,948	3.92	1.14	9.80	101,397
2033	10.4	10.2	58.5	529	0.89	1.82	4,681	4,683	1.82	490	492	—	100,843	100,843	3.91	1.02	8.54	101,253
2034	10.3	10.1	58.5	527	0.89	1.82	4,681	4,683	1.82	490	492	—	100,742	100,742	3.90	1.02	7.40	101,151
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	10.9	10.7	60.8	530	0.89	1.82	4,681	4,683	1.82	490	492	—	101,126	101,126	4.08	1.20	0.57	101,585
2026	10.8	10.6	60.5	529	0.89	1.82	4,681	4,683	1.82	490	492	—	101,032	101,032	4.08	1.20	0.52	101,490
2027	10.6	10.5	60.2	527	0.89	1.82	4,681	4,683	1.82	490	492	—	100,920	100,920	4.08	1.20	0.47	101,379
2028	10.6	10.4	60.0	526	0.89	1.82	4,681	4,683	1.82	490	492	—	100,820	100,820	3.94	1.18	0.42	101,271
2029	10.5	10.3	59.6	524	0.89	1.82	4,681	4,683	1.82	490	492	—	100,652	100,652	3.94	1.17	0.37	101,100
2030	10.3	10.3	59.4	523	0.89	1.82	4,681	4,683	1.82	490	492	—	100,532	100,532	3.94	1.16	0.33	100,975
2031	10.3	10.2	59.2	522	0.89	1.82	4,681	4,683	1.82	490	492	—	100,419	100,419	3.93	1.16	0.29	100,862
2032	10.2	10.0	59.0	521	0.89	1.82	4,681	4,683	1.82	490	492	—	100,318	100,318	3.93	1.14	0.25	100,757
2033	10.2	10.00	58.8	521	0.89	1.82	4,681	4,683	1.82	490	492	—	100,223	100,223	3.92	1.14	0.22	100,662
2034	10.1	9.95	58.6	520	0.89	1.82	4,681	4,683	1.82	490	492	—	100,132	100,132	3.91	1.14	0.19	100,570
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	7.98	7.76	43.3	383	0.64	1.30	3,301	3,302	1.30	346	347	—	72,445	72,445	2.91	0.85	6.81	72,779
2026	7.82	7.69	43.1	381	0.64	1.30	3,301	3,302	1.30	346	347	—	72,373	72,373	2.91	0.85	6.18	72,706
2027	7.76	7.64	42.9	379	0.64	1.30	3,301	3,302	1.30	346	347	—	72,289	72,289	2.90	0.85	5.56	72,620
2028	7.64	7.51	42.8	379	0.64	1.30	3,310	3,311	1.30	347	348	—	72,411	72,411	2.91	0.84	4.99	72,739
2029	7.56	7.44	42.6	377	0.64	1.30	3,301	3,302	1.30	346	347	—	72,089	72,089	2.81	0.84	4.43	72,413

2030	7.51	7.39	42.4	376	0.64	1.30	3,301	3,302	1.30	346	347	—	71,999	71,999	2.81	0.83	3.91	72,320
2031	7.38	7.35	42.3	375	0.64	1.30	3,301	3,302	1.30	346	347	—	71,915	71,915	2.80	0.83	3.44	72,235
2032	7.35	7.23	42.2	376	0.64	1.30	3,310	3,311	1.30	347	348	—	72,037	72,037	2.81	0.82	3.03	72,354
2033	7.31	7.19	42.0	374	0.64	1.30	3,301	3,302	1.30	346	347	—	71,769	71,769	2.80	0.82	2.64	72,085
2034	7.26	7.14	41.9	373	0.64	1.30	3,301	3,302	1.30	346	347	—	71,701	71,701	2.79	0.82	2.28	72,017
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	1.46	1.42	7.91	69.8	0.12	0.24	602	603	0.24	63.1	63.3	—	11,994	11,994	0.48	0.14	1.13	12,049
2026	1.43	1.40	7.87	69.6	0.12	0.24	602	603	0.24	63.1	63.3	—	11,982	11,982	0.48	0.14	1.02	12,037
2027	1.42	1.39	7.83	69.3	0.12	0.24	602	603	0.24	63.1	63.3	—	11,968	11,968	0.48	0.14	0.92	12,023
2028	1.39	1.37	7.82	69.2	0.12	0.24	604	604	0.24	63.3	63.5	—	11,989	11,989	0.48	0.14	0.83	12,043
2029	1.38	1.36	7.77	68.9	0.12	0.24	602	603	0.24	63.1	63.3	—	11,935	11,935	0.46	0.14	0.73	11,989
2030	1.37	1.35	7.74	68.7	0.12	0.24	602	603	0.24	63.1	63.3	—	11,920	11,920	0.46	0.14	0.65	11,973
2031	1.35	1.34	7.71	68.5	0.12	0.24	602	603	0.24	63.1	63.3	—	11,906	11,906	0.46	0.14	0.57	11,959
2032	1.34	1.32	7.71	68.5	0.12	0.24	604	604	0.24	63.3	63.5	—	11,927	11,927	0.47	0.14	0.50	11,979
2033	1.33	1.31	7.66	68.2	0.12	0.24	602	603	0.24	63.1	63.3	—	11,882	11,882	0.46	0.14	0.44	11,935
2034	1.33	1.30	7.64	68.1	0.12	0.24	602	603	0.24	63.1	63.3	—	11,871	11,871	0.46	0.14	0.38	11,923

3. Construction Emissions Details

3.1. Site Preparation (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.98	3.98	20.7	226	0.39	0.80	—	0.80	0.80	—	0.80	—	42,363	42,363	1.72	0.34	—	42,508

Dust From Material Movement	—	—	—	—	—	—	40.9	40.9	—	21.0	21.0	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.98	3.98	20.7	226	0.39	0.80	—	0.80	0.80	—	0.80	—	42,363	42,363	1.72	0.34	—	42,508
Dust From Material Movement	—	—	—	—	—	—	40.9	40.9	—	21.0	21.0	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.85	2.85	14.8	162	0.28	0.57	—	0.57	0.57	—	0.57	—	30,259	30,259	1.23	0.25	—	30,363
Dust From Material Movement	—	—	—	—	—	—	29.2	29.2	—	15.0	15.0	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.52	0.52	2.70	29.5	0.05	0.10	—	0.10	0.10	—	0.10	—	5,010	5,010	0.20	0.04	—	5,027

Dust From Material Movement	—	—	—	—	—	—	5.33	5.33	—	2.74	2.74	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.07	0.94	0.89	16.9	0.00	0.00	1,961	1,961	0.00	196	196	—	2,218	2,218	0.09	0.07	7.82	2,250
Vendor	0.06	0.04	1.12	0.52	0.01	0.01	240	240	0.01	24.0	24.0	—	1,007	1,007	0.01	0.14	2.78	1,051
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.82	0.74	1.06	9.54	0.00	0.00	1,961	1,961	0.00	196	196	—	1,874	1,874	0.09	0.07	0.20	1,898
Vendor	0.05	0.04	1.24	0.53	0.01	0.01	240	240	0.01	24.0	24.0	—	1,008	1,008	0.01	0.14	0.07	1,049
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.67	0.57	0.71	8.60	0.00	0.00	1,383	1,383	0.00	138	138	—	1,439	1,439	0.06	0.05	2.41	1,458
Vendor	0.04	0.03	0.87	0.38	0.01	0.01	169	169	0.01	16.9	16.9	—	720	720	0.01	0.10	0.86	750
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.10	0.13	1.57	0.00	0.00	252	252	0.00	25.2	25.2	—	238	238	0.01	0.01	0.40	241
Vendor	0.01	0.01	0.16	0.07	< 0.005	< 0.005	30.9	30.9	< 0.005	3.09	3.09	—	119	119	< 0.005	0.02	0.14	124
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.3. Site Preparation (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.98	3.98	20.7	226	0.39	0.80	—	0.80	0.80	—	0.80	—	42,384	42,384	1.72	0.34	—	42,529
Dust From Material Movement	—	—	—	—	—	—	40.9	40.9	—	21.0	21.0	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.98	3.98	20.7	226	0.39	0.80	—	0.80	0.80	—	0.80	—	42,384	42,384	1.72	0.34	—	42,529
Dust From Material Movement	—	—	—	—	—	—	40.9	40.9	—	21.0	21.0	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.85	2.85	14.8	162	0.28	0.57	—	0.57	0.57	—	0.57	—	30,274	30,274	1.23	0.25	—	30,378
Dust From Material Movement	—	—	—	—	—	—	29.2	29.2	—	15.0	15.0	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.52	0.52	2.70	29.5	0.05	0.10	—	0.10	0.10	—	0.10	—	5,012	5,012	0.20	0.04	—	5,029
Dust From Material Movement	—	—	—	—	—	—	5.33	5.33	—	2.74	2.74	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.96	0.89	0.82	15.6	0.00	0.00	1,961	1,961	0.00	196	196	—	2,176	2,176	0.08	0.07	7.14	2,206
Vendor	0.05	0.04	1.07	0.48	0.01	0.01	240	240	0.01	24.0	24.0	—	988	988	0.01	0.14	2.48	1,032
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.77	0.70	0.94	8.77	0.00	0.00	1,961	1,961	0.00	196	196	—	1,839	1,839	0.09	0.07	0.18	1,862
Vendor	0.05	0.04	1.18	0.49	0.01	0.01	240	240	0.01	24.0	24.0	—	989	989	0.01	0.14	0.06	1,030
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.59	0.54	0.67	7.93	0.00	0.00	1,383	1,383	0.00	138	138	—	1,412	1,412	0.06	0.05	2.20	1,431
Vendor	0.04	0.03	0.83	0.35	0.01	0.01	169	169	0.01	16.9	16.9	—	706	706	0.01	0.10	0.76	736
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.10	0.12	1.45	0.00	0.00	252	252	0.00	25.2	25.2	—	234	234	0.01	0.01	0.36	237

Vendor	0.01	< 0.005	0.15	0.06	< 0.005	< 0.005	30.9	30.9	< 0.005	3.09	3.09	—	117	117	< 0.005	0.02	0.13	122
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Site Preparation (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.98	3.98	20.7	226	0.39	0.80	—	0.80	0.80	—	0.80	—	42,383	42,383	1.72	0.34	—	42,528
Dust From Material Movement	—	—	—	—	—	—	40.9	40.9	—	21.0	21.0	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.98	3.98	20.7	226	0.39	0.80	—	0.80	0.80	—	0.80	—	42,383	42,383	1.72	0.34	—	42,528
Dust From Material Movement	—	—	—	—	—	—	40.9	40.9	—	21.0	21.0	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	2.85	2.85	14.8	162	0.28	0.57	—	0.57	0.57	—	0.57	—	30,273	30,273	1.23	0.25	—	30,377
Dust From Material Movement	—	—	—	—	—	—	29.2	29.2	—	15.0	15.0	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.52	0.52	2.70	29.5	0.05	0.10	—	0.10	0.10	—	0.10	—	5,012	5,012	0.20	0.04	—	5,029
Dust From Material Movement	—	—	—	—	—	—	5.33	5.33	—	2.74	2.74	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.91	0.84	0.76	14.1	0.00	0.00	1,961	1,961	0.00	196	196	—	2,138	2,138	0.08	0.07	6.49	2,168
Vendor	0.05	0.04	1.02	0.45	0.01	0.01	240	240	0.01	24.0	24.0	—	968	968	0.01	0.14	2.16	1,011
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.68	0.61	0.87	7.89	0.00	0.00	1,961	1,961	0.00	196	196	—	1,807	1,807	0.09	0.07	0.17	1,831
Vendor	0.04	0.04	1.12	0.46	0.01	0.01	240	240	0.01	24.0	24.0	—	969	969	0.01	0.14	0.06	1,010
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.56	0.51	0.58	7.15	0.00	0.00	1,383	1,383	0.00	138	138	—	1,388	1,388	0.06	0.05	2.00	1,406

Vendor	0.04	0.03	0.79	0.32	0.01	0.01	169	169	0.01	16.9	16.9	—	692	692	0.01	0.10	0.67	721
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.09	0.11	1.31	0.00	0.00	252	252	0.00	25.2	25.2	—	230	230	0.01	0.01	0.33	233
Vendor	0.01	< 0.005	0.14	0.06	< 0.005	< 0.005	30.9	30.9	< 0.005	3.09	3.09	—	115	115	< 0.005	0.02	0.11	119
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Site Preparation (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.98	3.98	20.7	226	0.39	0.80	—	0.80	0.80	—	0.80	—	42,400	42,400	1.72	0.34	—	42,546
Dust From Material Movement	—	—	—	—	—	—	40.9	40.9	—	21.0	21.0	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.98	3.98	20.7	226	0.39	0.80	—	0.80	0.80	—	0.80	—	42,400	42,400	1.72	0.34	—	42,546

Dust From Material Movement	—	—	—	—	—	—	40.9	40.9	—	21.0	21.0	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.85	2.85	14.8	162	0.28	0.57	—	0.57	0.57	—	0.57	—	30,369	30,369	1.23	0.25	—	30,473
Dust From Material Movement	—	—	—	—	—	—	29.3	29.3	—	15.1	15.1	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.52	0.52	2.71	29.6	0.05	0.10	—	0.10	0.10	—	0.10	—	5,028	5,028	0.20	0.04	—	5,045
Dust From Material Movement	—	—	—	—	—	—	5.34	5.34	—	2.75	2.75	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.87	0.74	0.69	13.1	0.00	0.00	1,961	1,961	0.00	196	196	—	2,097	2,097	0.08	0.07	5.89	2,126
Vendor	0.04	0.03	0.98	0.42	0.01	0.01	240	240	0.01	24.0	24.0	—	944	944	0.01	0.13	1.85	984
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.66	0.58	0.81	7.33	0.00	0.00	1,961	1,961	0.00	196	196	—	1,774	1,774	0.03	0.07	0.15	1,796
Vendor	0.04	0.03	1.07	0.43	0.01	0.01	240	240	0.01	24.0	24.0	—	944	944	0.01	0.13	0.05	983
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.50	0.45	0.53	6.65	0.00	0.00	1,386	1,386	0.00	138	138	—	1,365	1,365	0.06	0.05	1.82	1,383
Vendor	0.03	0.02	0.76	0.30	0.01	0.01	170	170	0.01	17.0	17.0	—	676	676	0.01	0.09	0.57	704
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.10	1.21	0.00	0.00	253	253	0.00	25.3	25.3	—	226	226	0.01	0.01	0.30	229
Vendor	0.01	< 0.005	0.14	0.06	< 0.005	< 0.005	31.0	31.0	< 0.005	3.10	3.10	—	112	112	< 0.005	0.02	0.09	117
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Site Preparation (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.98	3.98	20.7	226	0.39	0.80	—	0.80	0.80	—	0.80	—	42,368	42,368	1.72	0.34	—	42,513
Dust From Material Movement	—	—	—	—	—	—	40.9	40.9	—	21.0	21.0	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.98	3.98	20.7	226	0.39	0.80	—	0.80	0.80	—	0.80	—	42,368	42,368	1.72	0.34	—	42,513
Dust From Material Movement	—	—	—	—	—	—	40.9	40.9	—	21.0	21.0	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.85	2.85	14.8	162	0.28	0.57	—	0.57	0.57	—	0.57	—	30,263	30,263	1.23	0.25	—	30,367
Dust From Material Movement	—	—	—	—	—	—	29.2	29.2	—	15.0	15.0	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.52	0.52	2.70	29.5	0.05	0.10	—	0.10	0.10	—	0.10	—	5,010	5,010	0.20	0.04	—	5,028
Dust From Material Movement	—	—	—	—	—	—	5.33	5.33	—	2.74	2.74	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.76	0.70	0.63	12.1	0.00	0.00	1,961	1,961	0.00	196	196	—	2,059	2,059	0.08	0.07	5.32	2,087
Vendor	0.04	0.03	0.94	0.39	0.01	0.01	240	240	0.01	24.0	24.0	—	918	918	0.01	0.13	1.57	958
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.63	0.56	0.69	6.76	0.00	0.00	1,961	1,961	0.00	196	196	—	1,742	1,742	0.03	0.07	0.14	1,763
Vendor	0.04	0.03	1.03	0.41	0.01	0.01	240	240	0.01	24.0	24.0	—	919	919	0.01	0.13	0.04	957
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.48	0.43	0.49	6.15	0.00	0.00	1,383	1,383	0.00	138	138	—	1,337	1,337	0.02	0.05	1.64	1,354
Vendor	0.03	0.02	0.72	0.28	0.01	0.01	169	169	0.01	16.9	16.9	—	656	656	0.01	0.09	0.49	684
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.09	1.12	0.00	0.00	252	252	0.00	25.2	25.2	—	221	221	< 0.005	0.01	0.27	224
Vendor	0.01	< 0.005	0.13	0.05	< 0.005	< 0.005	30.9	30.9	< 0.005	3.09	3.09	—	109	109	< 0.005	0.02	0.08	113
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Site Preparation (2030) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	3.98	3.98	20.7	226	0.39	0.80	—	0.80	0.80	—	0.80	—	42,365	42,365	1.72	0.34	—	42,511
Dust From Material Movement	—	—	—	—	—	—	40.9	40.9	—	21.0	21.0	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.98	3.98	20.7	226	0.39	0.80	—	0.80	0.80	—	0.80	—	42,365	42,365	1.72	0.34	—	42,511
Dust From Material Movement	—	—	—	—	—	—	40.9	40.9	—	21.0	21.0	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.85	2.85	14.8	162	0.28	0.57	—	0.57	0.57	—	0.57	—	30,261	30,261	1.23	0.25	—	30,365
Dust From Material Movement	—	—	—	—	—	—	29.2	29.2	—	15.0	15.0	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.52	0.52	2.70	29.5	0.05	0.10	—	0.10	0.10	—	0.10	—	5,010	5,010	0.20	0.04	—	5,027

Dust From Material Movement	—	—	—	—	—	—	5.33	5.33	—	2.74	2.74	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.73	0.66	0.56	11.2	0.00	0.00	1,961	1,961	0.00	196	196	—	2,022	2,022	0.02	0.07	4.77	2,048
Vendor	0.04	0.03	0.90	0.37	0.01	0.01	240	240	0.01	24.0	24.0	—	891	891	0.01	0.12	1.32	929
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.54	0.53	0.62	6.26	0.00	0.00	1,961	1,961	0.00	196	196	—	1,712	1,712	0.03	0.07	0.12	1,733
Vendor	0.04	0.03	0.99	0.39	0.01	0.01	240	240	0.01	24.0	24.0	—	892	892	0.01	0.12	0.03	928
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.45	0.40	0.44	5.68	0.00	0.00	1,383	1,383	0.00	138	138	—	1,314	1,314	0.02	0.05	1.47	1,330
Vendor	0.03	0.02	0.69	0.27	0.01	0.01	169	169	0.01	16.9	16.9	—	637	637	0.01	0.09	0.41	663
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.08	1.04	0.00	0.00	252	252	0.00	25.2	25.2	—	218	218	< 0.005	0.01	0.24	220
Vendor	0.01	< 0.005	0.13	0.05	< 0.005	< 0.005	30.9	30.9	< 0.005	3.09	3.09	—	105	105	< 0.005	0.01	0.07	110
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Site Preparation (2031) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.98	3.98	20.7	226	0.39	0.80	—	0.80	0.80	—	0.80	—	42,365	42,365	1.72	0.34	—	42,511
Dust From Material Movement	—	—	—	—	—	—	40.9	40.9	—	21.0	21.0	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.98	3.98	20.7	226	0.39	0.80	—	0.80	0.80	—	0.80	—	42,365	42,365	1.72	0.34	—	42,511
Dust From Material Movement	—	—	—	—	—	—	40.9	40.9	—	21.0	21.0	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.85	2.85	14.8	162	0.28	0.57	—	0.57	0.57	—	0.57	—	30,261	30,261	1.23	0.25	—	30,365
Dust From Material Movement	—	—	—	—	—	—	29.2	29.2	—	15.0	15.0	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.52	0.52	2.70	29.5	0.05	0.10	—	0.10	0.10	—	0.10	—	5,010	5,010	0.20	0.04	—	5,027
Dust From Material Movement	—	—	—	—	—	—	5.33	5.33	—	2.74	2.74	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.68	0.62	0.50	10.3	0.00	0.00	1,961	1,961	0.00	196	196	—	1,989	1,989	0.02	0.07	4.27	2,014
Vendor	0.04	0.03	0.87	0.36	0.01	0.01	240	240	0.01	24.0	24.0	—	864	864	0.01	0.12	1.09	901
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.52	0.51	0.56	5.76	0.00	0.00	1,961	1,961	0.00	196	196	—	1,684	1,684	0.02	0.07	0.11	1,705
Vendor	0.04	0.03	0.95	0.37	0.01	0.01	240	240	0.01	24.0	24.0	—	865	865	0.01	0.12	0.03	901
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.39	0.38	0.39	5.25	0.00	0.00	1,383	1,383	0.00	138	138	—	1,292	1,292	0.01	0.05	1.31	1,308
Vendor	0.03	0.02	0.67	0.26	0.01	0.01	169	169	0.01	16.9	16.9	—	617	617	0.01	0.09	0.34	644
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.07	0.96	0.00	0.00	252	252	0.00	25.2	25.2	—	214	214	< 0.005	0.01	0.22	217

Vendor	0.01	< 0.005	0.12	0.05	< 0.005	< 0.005	30.9	30.9	< 0.005	3.09	3.09	—	102	102	< 0.005	0.01	0.06	107
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.15. Site Preparation (2032) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.98	3.98	20.7	226	0.39	0.80	—	0.80	0.80	—	0.80	—	42,368	42,368	1.72	0.34	—	42,513
Dust From Material Movement	—	—	—	—	—	—	40.9	40.9	—	21.0	21.0	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.98	3.98	20.7	226	0.39	0.80	—	0.80	0.80	—	0.80	—	42,368	42,368	1.72	0.34	—	42,513
Dust From Material Movement	—	—	—	—	—	—	40.9	40.9	—	21.0	21.0	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	2.85	2.85	14.8	162	0.28	0.57	—	0.57	0.57	—	0.57	—	30,346	30,346	1.23	0.25	—	30,450
Dust From Material Movement	—	—	—	—	—	—	29.3	29.3	—	15.1	15.1	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.52	0.52	2.71	29.6	0.05	0.10	—	0.10	0.10	—	0.10	—	5,024	5,024	0.20	0.04	—	5,041
Dust From Material Movement	—	—	—	—	—	—	5.34	5.34	—	2.75	2.75	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.59	0.58	0.43	9.61	0.00	0.00	1,961	1,961	0.00	196	196	—	1,959	1,959	0.02	0.07	3.80	1,983
Vendor	0.04	0.03	0.84	0.35	0.01	0.01	240	240	0.01	24.0	24.0	—	838	838	0.01	0.11	0.89	873
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.49	0.42	0.49	5.39	0.00	0.00	1,961	1,961	0.00	196	196	—	1,659	1,659	0.02	0.07	0.10	1,680
Vendor	0.04	0.03	0.92	0.36	0.01	0.01	240	240	0.01	24.0	24.0	—	839	839	0.01	0.11	0.02	873
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.37	0.32	0.35	4.89	0.00	0.00	1,386	1,386	0.00	138	138	—	1,277	1,277	0.01	0.05	1.17	1,293

Vendor	0.03	0.02	0.64	0.25	0.01	0.01	170	170	0.01	17.0	17.0	—	601	601	0.01	0.08	0.28	625
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.06	0.89	0.00	0.00	253	253	0.00	25.3	25.3	—	211	211	< 0.005	0.01	0.19	214
Vendor	0.01	< 0.005	0.12	0.05	< 0.005	< 0.005	31.0	31.0	< 0.005	3.10	3.10	—	99.4	99.4	< 0.005	0.01	0.05	104
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.17. Site Preparation (2033) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.98	3.98	20.7	226	0.39	0.80	—	0.80	0.80	—	0.80	—	42,368	42,368	1.72	0.34	—	42,513
Dust From Material Movement	—	—	—	—	—	—	40.9	40.9	—	21.0	21.0	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.98	3.98	20.7	226	0.39	0.80	—	0.80	0.80	—	0.80	—	42,368	42,368	1.72	0.34	—	42,513

Dust From Material Movement	—	—	—	—	—	—	40.9	40.9	—	21.0	21.0	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.85	2.85	14.8	162	0.28	0.57	—	0.57	0.57	—	0.57	—	30,263	30,263	1.23	0.25	—	30,367
Dust From Material Movement	—	—	—	—	—	—	29.2	29.2	—	15.0	15.0	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.52	0.52	2.70	29.5	0.05	0.10	—	0.10	0.10	—	0.10	—	5,010	5,010	0.20	0.04	—	5,028
Dust From Material Movement	—	—	—	—	—	—	5.33	5.33	—	2.74	2.74	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.56	0.50	0.37	8.97	0.00	0.00	1,961	1,961	0.00	196	196	—	1,931	1,931	0.02	0.01	3.36	1,938
Vendor	0.04	0.03	0.82	0.34	0.01	0.01	240	240	0.01	24.0	24.0	—	814	814	0.01	0.11	0.72	849
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.47	0.40	0.43	5.03	0.00	0.00	1,961	1,961	0.00	196	196	—	1,637	1,637	0.02	0.07	0.09	1,658
Vendor	0.04	0.03	0.89	0.35	0.01	0.01	240	240	0.01	24.0	24.0	—	815	815	0.01	0.11	0.02	849
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.36	0.31	0.31	4.58	0.00	0.00	1,383	1,383	0.00	138	138	—	1,255	1,255	0.01	0.05	1.04	1,271
Vendor	0.03	0.02	0.63	0.25	0.01	0.01	169	169	0.01	16.9	16.9	—	582	582	0.01	0.08	0.22	606
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.06	0.84	0.00	0.00	252	252	0.00	25.2	25.2	—	208	208	< 0.005	0.01	0.17	210
Vendor	0.01	< 0.005	0.11	0.04	< 0.005	< 0.005	30.9	30.9	< 0.005	3.09	3.09	—	96.3	96.3	< 0.005	0.01	0.04	100
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.19. Site Preparation (2034) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.98	3.98	20.7	226	0.39	0.80	—	0.80	0.80	—	0.80	—	42,368	42,368	1.72	0.34	—	42,513
Dust From Material Movement	—	—	—	—	—	—	40.9	40.9	—	21.0	21.0	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.98	3.98	20.7	226	0.39	0.80	—	0.80	0.80	—	0.80	—	42,368	42,368	1.72	0.34	—	42,513
Dust From Material Movement	—	—	—	—	—	—	40.9	40.9	—	21.0	21.0	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.85	2.85	14.8	162	0.28	0.57	—	0.57	0.57	—	0.57	—	30,263	30,263	1.23	0.25	—	30,367
Dust From Material Movement	—	—	—	—	—	—	29.2	29.2	—	15.0	15.0	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.52	0.52	2.70	29.5	0.05	0.10	—	0.10	0.10	—	0.10	—	5,010	5,010	0.20	0.04	—	5,028
Dust From Material Movement	—	—	—	—	—	—	5.33	5.33	—	2.74	2.74	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.52	0.46	0.37	8.32	0.00	0.00	1,961	1,961	0.00	196	196	—	1,905	1,905	0.02	0.01	2.96	1,912
Vendor	0.04	0.03	0.79	0.33	0.01	0.01	240	240	0.01	24.0	24.0	—	791	791	< 0.005	0.11	0.58	826
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.45	0.38	0.37	4.67	0.00	0.00	1,961	1,961	0.00	196	196	—	1,615	1,615	0.02	0.07	0.08	1,636
Vendor	0.04	0.03	0.86	0.35	0.01	0.01	240	240	0.01	24.0	24.0	—	792	792	< 0.005	0.11	0.02	826
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.34	0.29	0.26	4.24	0.00	0.00	1,383	1,383	0.00	138	138	—	1,239	1,239	0.01	0.05	0.91	1,255
Vendor	0.03	0.02	0.61	0.24	0.01	0.01	169	169	0.01	16.9	16.9	—	566	566	< 0.005	0.08	0.18	590
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.05	0.77	0.00	0.00	252	252	0.00	25.2	25.2	—	205	205	< 0.005	0.01	0.15	208
Vendor	0.01	< 0.005	0.11	0.04	< 0.005	< 0.005	30.9	30.9	< 0.005	3.09	3.09	—	93.6	93.6	< 0.005	0.01	0.03	97.7
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.21. Grading (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	5.11	5.11	35.4	283	0.49	0.99	—	0.99	0.99	—	0.99	—	52,791	52,791	2.14	0.43	—	52,972
Dust From Material Movement	—	—	—	—	—	—	19.1	19.1	—	7.60	7.60	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	5.11	5.11	35.4	283	0.49	0.99	—	0.99	0.99	—	0.99	—	52,791	52,791	2.14	0.43	—	52,972
Dust From Material Movement	—	—	—	—	—	—	19.1	19.1	—	7.60	7.60	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.65	3.65	25.3	202	0.35	0.71	—	0.71	0.71	—	0.71	—	37,708	37,708	1.53	0.31	—	37,837
Dust From Material Movement	—	—	—	—	—	—	13.7	13.7	—	5.43	5.43	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.67	0.67	4.62	36.9	0.06	0.13	—	0.13	0.13	—	0.13	—	6,243	6,243	0.25	0.05	—	6,264

Dust From Material Movement	—	—	—	—	—	—	2.50	2.50	—	0.99	0.99	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.19	1.05	0.99	18.8	0.00	0.00	2,179	2,179	0.00	218	218	—	2,465	2,465	0.10	0.08	8.69	2,500
Vendor	0.06	0.04	1.12	0.52	0.01	0.01	240	240	0.01	24.0	24.0	—	1,007	1,007	0.01	0.14	2.78	1,051
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.91	0.82	1.18	10.6	0.00	0.00	2,179	2,179	0.00	218	218	—	2,082	2,082	0.10	0.08	0.22	2,109
Vendor	0.05	0.04	1.24	0.53	0.01	0.01	240	240	0.01	24.0	24.0	—	1,008	1,008	0.01	0.14	0.07	1,049
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.74	0.63	0.79	9.55	0.00	0.00	1,536	1,536	0.00	153	153	—	1,599	1,599	0.07	0.06	2.68	1,620
Vendor	0.04	0.03	0.87	0.38	0.01	0.01	169	169	0.01	16.9	16.9	—	720	720	0.01	0.10	0.86	750
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.13	0.12	0.14	1.74	0.00	0.00	280	280	0.00	28.0	28.0	—	265	265	0.01	0.01	0.44	268
Vendor	0.01	0.01	0.16	0.07	< 0.005	< 0.005	30.9	30.9	< 0.005	3.09	3.09	—	119	119	< 0.005	0.02	0.14	124
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.23. Grading (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	5.11	5.11	35.4	283	0.49	0.99	—	0.99	0.99	—	0.99	—	52,789	52,789	2.14	0.43	—	52,970
Dust From Material Movement	—	—	—	—	—	—	19.1	19.1	—	7.60	7.60	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	5.11	5.11	35.4	283	0.49	0.99	—	0.99	0.99	—	0.99	—	52,789	52,789	2.14	0.43	—	52,970
Dust From Material Movement	—	—	—	—	—	—	19.1	19.1	—	7.60	7.60	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.65	3.65	25.3	202	0.35	0.71	—	0.71	0.71	—	0.71	—	37,706	37,706	1.53	0.31	—	37,836
Dust From Material Movement	—	—	—	—	—	—	13.7	13.7	—	5.43	5.43	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.67	0.67	4.62	36.9	0.06	0.13	—	0.13	0.13	—	0.13	—	6,243	6,243	0.25	0.05	—	6,264
Dust From Material Movement	—	—	—	—	—	—	2.50	2.50	—	0.99	0.99	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.07	0.99	0.91	17.3	0.00	0.00	2,179	2,179	0.00	218	218	—	2,417	2,417	0.09	0.08	7.93	2,451
Vendor	0.05	0.04	1.07	0.48	0.01	0.01	240	240	0.01	24.0	24.0	—	988	988	0.01	0.14	2.48	1,032
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.86	0.78	1.04	9.75	0.00	0.00	2,179	2,179	0.00	218	218	—	2,043	2,043	0.10	0.08	0.21	2,069
Vendor	0.05	0.04	1.18	0.49	0.01	0.01	240	240	0.01	24.0	24.0	—	989	989	0.01	0.14	0.06	1,030
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.66	0.60	0.74	8.82	0.00	0.00	1,536	1,536	0.00	153	153	—	1,569	1,569	0.07	0.06	2.45	1,590
Vendor	0.04	0.03	0.83	0.35	0.01	0.01	169	169	0.01	16.9	16.9	—	706	706	0.01	0.10	0.76	736
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.11	0.14	1.61	0.00	0.00	280	280	0.00	28.0	28.0	—	260	260	0.01	0.01	0.41	263

Vendor	0.01	< 0.005	0.15	0.06	< 0.005	< 0.005	30.9	30.9	< 0.005	3.09	3.09	—	117	117	< 0.005	0.02	0.13	122
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.25. Grading (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	5.11	5.11	35.4	283	0.49	0.99	—	0.99	0.99	—	0.99	—	52,785	52,785	2.14	0.43	—	52,966
Dust From Material Movement	—	—	—	—	—	—	19.1	19.1	—	7.60	7.60	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	5.11	5.11	35.4	283	0.49	0.99	—	0.99	0.99	—	0.99	—	52,785	52,785	2.14	0.43	—	52,966
Dust From Material Movement	—	—	—	—	—	—	19.1	19.1	—	7.60	7.60	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	3.65	3.65	25.3	202	0.35	0.71	—	0.71	0.71	—	0.71	—	37,703	37,703	1.53	0.31	—	37,833
Dust From Material Movement	—	—	—	—	—	—	13.7	13.7	—	5.43	5.43	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.67	0.67	4.62	36.9	0.06	0.13	—	0.13	0.13	—	0.13	—	6,242	6,242	0.25	0.05	—	6,264
Dust From Material Movement	—	—	—	—	—	—	2.50	2.50	—	0.99	0.99	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.01	0.93	0.84	15.7	0.00	0.00	2,179	2,179	0.00	218	218	—	2,375	2,375	0.09	0.08	7.21	2,408
Vendor	0.05	0.04	1.02	0.45	0.01	0.01	240	240	0.01	24.0	24.0	—	968	968	0.01	0.14	2.16	1,011
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.76	0.68	0.97	8.77	0.00	0.00	2,179	2,179	0.00	218	218	—	2,008	2,008	0.10	0.08	0.19	2,034
Vendor	0.04	0.04	1.12	0.46	0.01	0.01	240	240	0.01	24.0	24.0	—	969	969	0.01	0.14	0.06	1,010
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.63	0.57	0.64	7.95	0.00	0.00	1,536	1,536	0.00	153	153	—	1,542	1,542	0.07	0.05	2.23	1,562

Vendor	0.04	0.03	0.79	0.32	0.01	0.01	169	169	0.01	16.9	16.9	—	692	692	0.01	0.10	0.67	721
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.10	0.12	1.45	0.00	0.00	280	280	0.00	28.0	28.0	—	255	255	0.01	0.01	0.37	259
Vendor	0.01	< 0.005	0.14	0.06	< 0.005	< 0.005	30.9	30.9	< 0.005	3.09	3.09	—	115	115	< 0.005	0.02	0.11	119
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.27. Grading (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	5.11	5.11	35.4	283	0.49	0.99	—	0.99	0.99	—	0.99	—	52,786	52,786	2.14	0.43	—	52,967
Dust From Material Movement	—	—	—	—	—	—	19.1	19.1	—	7.60	7.60	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	5.11	5.11	35.4	283	0.49	0.99	—	0.99	0.99	—	0.99	—	52,786	52,786	2.14	0.43	—	52,967

Dust From Material Movement	—	—	—	—	—	—	19.1	19.1	—	7.60	7.60	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.66	3.66	25.4	203	0.35	0.71	—	0.71	0.71	—	0.71	—	37,808	37,808	1.53	0.31	—	37,937
Dust From Material Movement	—	—	—	—	—	—	13.7	13.7	—	5.44	5.44	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.67	0.67	4.63	37.0	0.06	0.13	—	0.13	0.13	—	0.13	—	6,259	6,259	0.25	0.05	—	6,281
Dust From Material Movement	—	—	—	—	—	—	2.50	2.50	—	0.99	0.99	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.96	0.82	0.77	14.5	0.00	0.00	2,179	2,179	0.00	218	218	—	2,330	2,330	0.09	0.08	6.54	2,363
Vendor	0.04	0.03	0.98	0.42	0.01	0.01	240	240	0.01	24.0	24.0	—	944	944	0.01	0.13	1.85	984
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.73	0.65	0.90	8.14	0.00	0.00	2,179	2,179	0.00	218	218	—	1,971	1,971	0.03	0.08	0.17	1,995
Vendor	0.04	0.03	1.07	0.43	0.01	0.01	240	240	0.01	24.0	24.0	—	944	944	0.01	0.13	0.05	983
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.56	0.50	0.59	7.39	0.00	0.00	1,540	1,540	0.00	154	154	—	1,517	1,517	0.07	0.05	2.03	1,537
Vendor	0.03	0.02	0.76	0.30	0.01	0.01	170	170	0.01	17.0	17.0	—	676	676	0.01	0.09	0.57	704
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.09	0.11	1.35	0.00	0.00	281	281	0.00	28.1	28.1	—	251	251	0.01	0.01	0.34	254
Vendor	0.01	< 0.005	0.14	0.06	< 0.005	< 0.005	31.0	31.0	< 0.005	3.10	3.10	—	112	112	< 0.005	0.02	0.09	117
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.29. Grading (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	5.11	5.11	35.4	283	0.49	0.99	—	0.99	0.99	—	0.99	—	52,769	52,769	2.14	0.43	—	52,950
Dust From Material Movement	—	—	—	—	—	—	19.1	19.1	—	7.60	7.60	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	5.11	5.11	35.4	283	0.49	0.99	—	0.99	0.99	—	0.99	—	52,769	52,769	2.14	0.43	—	52,950
Dust From Material Movement	—	—	—	—	—	—	19.1	19.1	—	7.60	7.60	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.65	3.65	25.3	202	0.35	0.71	—	0.71	0.71	—	0.71	—	37,692	37,692	1.53	0.31	—	37,822
Dust From Material Movement	—	—	—	—	—	—	13.7	13.7	—	5.43	5.43	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.67	0.67	4.62	36.9	0.06	0.13	—	0.13	0.13	—	0.13	—	6,240	6,240	0.25	0.05	—	6,262
Dust From Material Movement	—	—	—	—	—	—	2.50	2.50	—	0.99	0.99	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.85	0.77	0.70	13.4	0.00	0.00	2,179	2,179	0.00	218	218	—	2,287	2,287	0.09	0.08	5.91	2,319
Vendor	0.04	0.03	0.94	0.39	0.01	0.01	240	240	0.01	24.0	24.0	—	918	918	0.01	0.13	1.57	958
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.70	0.62	0.76	7.51	0.00	0.00	2,179	2,179	0.00	218	218	—	1,935	1,935	0.03	0.08	0.15	1,959
Vendor	0.04	0.03	1.03	0.41	0.01	0.01	240	240	0.01	24.0	24.0	—	919	919	0.01	0.13	0.04	957
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.53	0.47	0.54	6.84	0.00	0.00	1,536	1,536	0.00	153	153	—	1,486	1,486	0.02	0.05	1.82	1,504
Vendor	0.03	0.02	0.72	0.28	0.01	0.01	169	169	0.01	16.9	16.9	—	656	656	0.01	0.09	0.49	684
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.09	0.10	1.25	0.00	0.00	280	280	0.00	28.0	28.0	—	246	246	< 0.005	0.01	0.30	249
Vendor	0.01	< 0.005	0.13	0.05	< 0.005	< 0.005	30.9	30.9	< 0.005	3.09	3.09	—	109	109	< 0.005	0.02	0.08	113
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.31. Grading (2030) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	5.11	5.11	35.4	283	0.49	0.99	—	0.99	0.99	—	0.99	—	52,768	52,768	2.14	0.43	—	52,949
Dust From Material Movement	—	—	—	—	—	—	19.1	19.1	—	7.60	7.60	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	5.11	5.11	35.4	283	0.49	0.99	—	0.99	0.99	—	0.99	—	52,768	52,768	2.14	0.43	—	52,949
Dust From Material Movement	—	—	—	—	—	—	19.1	19.1	—	7.60	7.60	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.65	3.65	25.3	202	0.35	0.71	—	0.71	0.71	—	0.71	—	37,692	37,692	1.53	0.31	—	37,821
Dust From Material Movement	—	—	—	—	—	—	13.7	13.7	—	5.43	5.43	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.67	0.67	4.62	36.9	0.06	0.13	—	0.13	0.13	—	0.13	—	6,240	6,240	0.25	0.05	—	6,262

Dust From Material Movement	—	—	—	—	—	—	2.50	2.50	—	0.99	0.99	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.81	0.73	0.62	12.4	0.00	0.00	2,179	2,179	0.00	218	218	—	2,247	2,247	0.02	0.08	5.30	2,275
Vendor	0.04	0.03	0.90	0.37	0.01	0.01	240	240	0.01	24.0	24.0	—	891	891	0.01	0.12	1.32	929
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.60	0.59	0.69	6.95	0.00	0.00	2,179	2,179	0.00	218	218	—	1,902	1,902	0.03	0.08	0.14	1,926
Vendor	0.04	0.03	0.99	0.39	0.01	0.01	240	240	0.01	24.0	24.0	—	892	892	0.01	0.12	0.03	928
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.50	0.45	0.49	6.31	0.00	0.00	1,536	1,536	0.00	153	153	—	1,460	1,460	0.02	0.05	1.63	1,478
Vendor	0.03	0.02	0.69	0.27	0.01	0.01	169	169	0.01	16.9	16.9	—	637	637	0.01	0.09	0.41	663
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.09	1.15	0.00	0.00	280	280	0.00	28.0	28.0	—	242	242	< 0.005	0.01	0.27	245
Vendor	0.01	< 0.005	0.13	0.05	< 0.005	< 0.005	30.9	30.9	< 0.005	3.09	3.09	—	105	105	< 0.005	0.01	0.07	110
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.33. Grading (2031) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	5.11	5.11	35.4	283	0.49	0.99	—	0.99	0.99	—	0.99	—	52,768	52,768	2.14	0.43	—	52,949
Dust From Material Movement	—	—	—	—	—	—	19.1	19.1	—	7.60	7.60	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	5.11	5.11	35.4	283	0.49	0.99	—	0.99	0.99	—	0.99	—	52,768	52,768	2.14	0.43	—	52,949
Dust From Material Movement	—	—	—	—	—	—	19.1	19.1	—	7.60	7.60	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.65	3.65	25.3	202	0.35	0.71	—	0.71	0.71	—	0.71	—	37,692	37,692	1.53	0.31	—	37,821
Dust From Material Movement	—	—	—	—	—	—	13.7	13.7	—	5.43	5.43	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.67	0.67	4.62	36.9	0.06	0.13	—	0.13	0.13	—	0.13	—	6,240	6,240	0.25	0.05	—	6,262
Dust From Material Movement	—	—	—	—	—	—	2.50	2.50	—	0.99	0.99	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.76	0.69	0.56	11.5	0.00	0.00	2,179	2,179	0.00	218	218	—	2,210	2,210	0.02	0.08	4.74	2,238
Vendor	0.04	0.03	0.87	0.36	0.01	0.01	240	240	0.01	24.0	24.0	—	864	864	0.01	0.12	1.09	901
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.57	0.56	0.62	6.40	0.00	0.00	2,179	2,179	0.00	218	218	—	1,871	1,871	0.02	0.08	0.12	1,895
Vendor	0.04	0.03	0.95	0.37	0.01	0.01	240	240	0.01	24.0	24.0	—	865	865	0.01	0.12	0.03	901
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.43	0.43	0.44	5.84	0.00	0.00	1,536	1,536	0.00	153	153	—	1,436	1,436	0.02	0.05	1.46	1,454
Vendor	0.03	0.02	0.67	0.26	0.01	0.01	169	169	0.01	16.9	16.9	—	617	617	0.01	0.09	0.34	644
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.08	1.07	0.00	0.00	280	280	0.00	28.0	28.0	—	238	238	< 0.005	0.01	0.24	241

Vendor	0.01	< 0.005	0.12	0.05	< 0.005	< 0.005	30.9	30.9	< 0.005	3.09	3.09	—	102	102	< 0.005	0.01	0.06	107
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.35. Grading (2032) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	5.11	5.11	35.4	283	0.49	0.99	—	0.99	0.99	—	0.99	—	52,769	52,769	2.14	0.43	—	52,950
Dust From Material Movement	—	—	—	—	—	—	19.1	19.1	—	7.60	7.60	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	5.11	5.11	35.4	283	0.49	0.99	—	0.99	0.99	—	0.99	—	52,769	52,769	2.14	0.43	—	52,950
Dust From Material Movement	—	—	—	—	—	—	19.1	19.1	—	7.60	7.60	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	3.66	3.66	25.4	203	0.35	0.71	—	0.71	0.71	—	0.71	—	37,795	37,795	1.53	0.31	—	37,925
Dust From Material Movement	—	—	—	—	—	—	13.7	13.7	—	5.44	5.44	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.67	0.67	4.63	37.0	0.06	0.13	—	0.13	0.13	—	0.13	—	6,257	6,257	0.25	0.05	—	6,279
Dust From Material Movement	—	—	—	—	—	—	2.50	2.50	—	0.99	0.99	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.66	0.65	0.48	10.7	0.00	0.00	2,179	2,179	0.00	218	218	—	2,176	2,176	0.02	0.08	4.22	2,204
Vendor	0.04	0.03	0.84	0.35	0.01	0.01	240	240	0.01	24.0	24.0	—	838	838	0.01	0.11	0.89	873
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.54	0.47	0.55	5.99	0.00	0.00	2,179	2,179	0.00	218	218	—	1,844	1,844	0.02	0.08	0.11	1,867
Vendor	0.04	0.03	0.92	0.36	0.01	0.01	240	240	0.01	24.0	24.0	—	839	839	0.01	0.11	0.02	873
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.41	0.35	0.39	5.43	0.00	0.00	1,540	1,540	0.00	154	154	—	1,418	1,418	0.02	0.05	1.30	1,436

Vendor	0.03	0.02	0.64	0.25	0.01	0.01	170	170	0.01	17.0	17.0	—	601	601	0.01	0.08	0.28	625
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.07	0.99	0.00	0.00	281	281	0.00	28.1	28.1	—	235	235	< 0.005	0.01	0.22	238
Vendor	0.01	< 0.005	0.12	0.05	< 0.005	< 0.005	31.0	31.0	< 0.005	3.10	3.10	—	99.4	99.4	< 0.005	0.01	0.05	104
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.37. Grading (2033) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	5.11	5.11	35.4	283	0.49	0.99	—	0.99	0.99	—	0.99	—	52,769	52,769	2.14	0.43	—	52,950
Dust From Material Movement	—	—	—	—	—	—	19.1	19.1	—	7.60	7.60	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	5.11	5.11	35.4	283	0.49	0.99	—	0.99	0.99	—	0.99	—	52,769	52,769	2.14	0.43	—	52,950

Dust From Material Movement	—	—	—	—	—	—	19.1	19.1	—	7.60	7.60	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.65	3.65	25.3	202	0.35	0.71	—	0.71	0.71	—	0.71	—	37,692	37,692	1.53	0.31	—	37,822
Dust From Material Movement	—	—	—	—	—	—	13.7	13.7	—	5.43	5.43	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.67	0.67	4.62	36.9	0.06	0.13	—	0.13	0.13	—	0.13	—	6,240	6,240	0.25	0.05	—	6,262
Dust From Material Movement	—	—	—	—	—	—	2.50	2.50	—	0.99	0.99	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.62	0.55	0.41	9.96	0.00	0.00	2,179	2,179	0.00	218	218	—	2,146	2,146	0.02	0.01	3.73	2,153
Vendor	0.04	0.03	0.82	0.34	0.01	0.01	240	240	0.01	24.0	24.0	—	814	814	0.01	0.11	0.72	849
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.52	0.45	0.48	5.59	0.00	0.00	2,179	2,179	0.00	218	218	—	1,819	1,819	0.02	0.08	0.10	1,842
Vendor	0.04	0.03	0.89	0.35	0.01	0.01	240	240	0.01	24.0	24.0	—	815	815	0.01	0.11	0.02	849
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.40	0.34	0.34	5.09	0.00	0.00	1,536	1,536	0.00	153	153	—	1,395	1,395	0.02	0.05	1.15	1,413
Vendor	0.03	0.02	0.63	0.25	0.01	0.01	169	169	0.01	16.9	16.9	—	582	582	0.01	0.08	0.22	606
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.06	0.93	0.00	0.00	280	280	0.00	28.0	28.0	—	231	231	< 0.005	0.01	0.19	234
Vendor	0.01	< 0.005	0.11	0.04	< 0.005	< 0.005	30.9	30.9	< 0.005	3.09	3.09	—	96.3	96.3	< 0.005	0.01	0.04	100
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.39. Grading (2034) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	5.11	5.11	35.4	283	0.49	0.99	—	0.99	0.99	—	0.99	—	52,769	52,769	2.14	0.43	—	52,950
Dust From Material Movement	—	—	—	—	—	—	19.1	19.1	—	7.60	7.60	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	5.11	5.11	35.4	283	0.49	0.99	—	0.99	0.99	—	0.99	—	52,769	52,769	2.14	0.43	—	52,950
Dust From Material Movement	—	—	—	—	—	—	19.1	19.1	—	7.60	7.60	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.65	3.65	25.3	202	0.35	0.71	—	0.71	0.71	—	0.71	—	37,692	37,692	1.53	0.31	—	37,822
Dust From Material Movement	—	—	—	—	—	—	13.7	13.7	—	5.43	5.43	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.67	0.67	4.62	36.9	0.06	0.13	—	0.13	0.13	—	0.13	—	6,240	6,240	0.25	0.05	—	6,262
Dust From Material Movement	—	—	—	—	—	—	2.50	2.50	—	0.99	0.99	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.58	0.51	0.41	9.25	0.00	0.00	2,179	2,179	0.00	218	218	—	2,117	2,117	0.02	0.01	3.28	2,124
Vendor	0.04	0.03	0.79	0.33	0.01	0.01	240	240	0.01	24.0	24.0	—	791	791	< 0.005	0.11	0.58	826
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.50	0.42	0.41	5.19	0.00	0.00	2,179	2,179	0.00	218	218	—	1,795	1,795	0.02	0.08	0.09	1,818
Vendor	0.04	0.03	0.86	0.35	0.01	0.01	240	240	0.01	24.0	24.0	—	792	792	< 0.005	0.11	0.02	826
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.37	0.32	0.29	4.72	0.00	0.00	1,536	1,536	0.00	153	153	—	1,376	1,376	0.01	0.05	1.01	1,394
Vendor	0.03	0.02	0.61	0.24	0.01	0.01	169	169	0.01	16.9	16.9	—	566	566	< 0.005	0.08	0.18	590
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.05	0.86	0.00	0.00	280	280	0.00	28.0	28.0	—	228	228	< 0.005	0.01	0.17	231
Vendor	0.01	< 0.005	0.11	0.04	< 0.005	< 0.005	30.9	30.9	< 0.005	3.09	3.09	—	93.6	93.6	< 0.005	0.01	0.03	97.7
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	1/1/2025	12/31/2034	5.00	2,608	—
Grading	Grading	1/1/2025	12/31/2034	5.00	2,608	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Tier 4 Final	24.0	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	32.0	8.00	84.0	0.37
Grading	Graders	Diesel	Tier 4 Final	8.00	8.00	148	0.41
Grading	Excavators	Diesel	Tier 4 Final	16.0	8.00	36.0	0.38
Grading	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	16.0	8.00	84.0	0.37
Grading	Scrapers	Diesel	Tier 4 Final	16.0	8.00	423	0.48
Grading	Rubber Tired Dozers	Diesel	Tier 4 Final	8.00	8.00	367	0.40

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	144	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	32.0	10.2	HHDT,MHDT

Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	160	18.5	LDA,LDT1,LDT2
Grading	Vendor	32.0	10.2	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Control Strategies Applied	PM10 Reduction	PM2.5 Reduction
Water unpaved roads twice daily	55%	55%
Limit vehicle speeds on unpaved roads to 25 mph	44%	44%
Sweep paved roads once per month	9%	9%

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	—	—	31,296	0.00	—
Grading	—	—	62,592	0.00	—

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	3	74%	74%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
City Park	0.00	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2025	0.00	457	0.03	< 0.005
2026	0.00	457	0.03	< 0.005
2027	0.00	457	0.03	< 0.005
2028	0.00	457	0.03	< 0.005
2029	0.00	457	0.03	< 0.005
2030	0.00	457	0.03	< 0.005
2031	0.00	457	0.03	< 0.005
2032	0.00	457	0.03	< 0.005
2033	0.00	457	0.03	< 0.005
2034	0.00	457	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	32.8	annual days of extreme heat
Extreme Precipitation	0.00	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.19	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	11.6
AQ-PM	19.1
AQ-DPM	9.09
Drinking Water	30.6
Lead Risk Housing	50.8
Pesticides	90.5
Toxic Releases	7.58
Traffic	3.06
Effect Indicators	—
CleanUp Sites	74.2
Groundwater	77.9
Haz Waste Facilities/Generators	93.2
Impaired Water Bodies	100.0
Solid Waste	86.5
Sensitive Population	—
Asthma	87.6
Cardio-vascular	83.2
Low Birth Weights	26.9

Socioeconomic Factor Indicators	—
Education	82.7
Housing	51.4
Linguistic	88.8
Poverty	94.9
Unemployment	99.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	16.66880534
Employed	7.173104068
Median HI	5.299627871
Education	—
Bachelor's or higher	5.017323239
High school enrollment	16.8741178
Preschool enrollment	68.89516233
Transportation	—
Auto Access	18.40112922
Active commuting	51.10997049
Social	—
2-parent households	13.28114975
Voting	16.79712563
Neighborhood	—
Alcohol availability	70.25535737
Park access	33.85089183
Retail density	4.311561658

Supermarket access	49.58295907
Tree canopy	0.782753753
Housing	—
Homeownership	38.3036058
Housing habitability	30.96368536
Low-inc homeowner severe housing cost burden	26.76761196
Low-inc renter severe housing cost burden	52.89362248
Uncrowded housing	38.58591043
Health Outcomes	—
Insured adults	21.00603105
Arthritis	0.0
Asthma ER Admissions	30.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	41.7
Cognitively Disabled	50.3
Physically Disabled	19.5
Heart Attack ER Admissions	46.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	54.3
Physical Health Not Good	0.0
Stroke	0.0

Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	14.1
Elderly	42.0
English Speaking	18.7
Foreign-born	65.3
Outdoor Workers	5.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	85.8
Traffic Density	4.9
Traffic Access	23.0
Other Indices	—
Hardship	92.9
Other Decision Support	—
2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	82.0
Healthy Places Index Score for Project Location (b)	11.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Construction: Construction Phases	Land use data are based applicant-provided buildout assumptions. Phase 1 - Floodway represents the buildout for construction of floodway and conservation land use designations.
Construction: Off-Road Equipment	Equipment increased based on scaler per buildout methodology.
Construction: Trips and VMT	Trips increased based on scaler per buildout methodology.
Construction: On-Road Fugitive Dust	85% paved roads assumed, according to ICAPCD guidance. PM reductions altered based on dust control plan implementation strategies (watering unpaved roads three times per day).

Lithium Valley SP Construction - Phase 2 (2035-2039) Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Lithium Valley SP Construction - Phase 2 (2035-2039)
Construction Start Date	1/1/2035
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	4.80
Location	33.18829759139308, -115.6026869228474
County	Imperial
City	Unincorporated
Air District	Imperial County APCD
Air Basin	Salton Sea
TAZ	5600
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
General Office Building	541	1000sqft	12.4	541,032	54,102	—	—	—

General Heavy Industry	1,419	1000sqft	32.6	1,419,215	141,923	—	—	—
General Heavy Industry	1,181	1000sqft	27.1	1,181,183	118,117	—	—	—
Manufacturing	748	1000sqft	17.2	748,456	74,845	—	—	—
Manufacturing	2,877	1000sqft	66.1	2,877,330	287,731	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	104	102	88.6	532	0.82	1.65	57,597	57,599	1.65	5,760	5,762	—	134,344	134,344	2.90	4.82	82.1	135,936
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	100	100.0	92.9	448	0.82	1.65	57,597	57,599	1.65	5,760	5,762	—	127,319	127,319	2.98	4.82	2.13	128,833
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	72.1	71.9	65.7	340	0.59	1.18	40,711	40,713	1.18	4,072	4,073	—	92,997	92,997	2.07	3.45	25.3	94,101
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	13.2	13.1	12.0	62.1	0.11	0.22	7,430	7,430	0.22	743	743	—	15,397	15,397	0.34	0.57	4.19	15,580

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2035	104	102	88.6	532	0.82	1.65	57,597	57,599	1.65	5,760	5,762	—	134,344	134,344	2.90	4.82	82.1	135,936
2036	102	101	87.8	520	0.82	1.65	57,597	57,599	1.65	5,760	5,762	—	133,158	133,158	2.82	4.82	69.9	134,736
2037	101	101	85.8	511	0.82	1.65	57,597	57,598	1.65	5,760	5,762	—	132,072	132,072	2.80	4.81	59.4	133,636
2038	101	100	85.3	504	0.82	1.65	57,597	57,598	1.65	5,760	5,762	—	131,300	131,300	2.80	4.55	50.4	132,776
2039	100	99.8	84.9	496	0.82	1.65	57,597	57,598	1.65	5,760	5,762	—	130,443	130,443	2.80	4.55	42.4	131,911
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2035	100	100.0	92.9	448	0.82	1.65	57,597	57,599	1.65	5,760	5,762	—	127,319	127,319	2.98	4.82	2.13	128,833
2036	100	99.8	90.7	440	0.82	1.65	57,597	57,599	1.65	5,760	5,762	—	126,217	126,217	2.88	4.82	1.82	127,728
2037	99.6	99.3	90.0	435	0.82	1.65	57,597	57,598	1.65	5,760	5,762	—	125,207	125,207	2.87	4.81	1.54	126,714
2038	99.4	99.0	89.4	431	0.82	1.65	57,597	57,598	1.65	5,760	5,762	—	124,480	124,480	2.88	4.55	1.31	125,908
2039	98.9	98.6	87.5	427	0.82	1.65	57,597	57,598	1.65	5,760	5,762	—	123,683	123,683	2.88	4.55	1.10	125,112
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2035	72.1	71.9	65.7	340	0.59	1.18	40,600	40,601	1.18	4,060	4,062	—	92,997	92,997	2.07	3.45	25.3	94,101
2036	72.1	71.8	64.3	335	0.59	1.18	40,711	40,713	1.18	4,072	4,073	—	92,439	92,439	2.06	3.45	21.7	93,542
2037	71.6	71.3	63.7	329	0.59	1.18	40,600	40,601	1.18	4,060	4,062	—	91,442	91,442	2.00	3.44	18.4	92,535
2038	71.2	71.0	62.4	325	0.59	1.18	40,600	40,601	1.18	4,060	4,062	—	90,910	90,910	2.00	3.25	15.5	91,944
2039	71.0	70.7	61.9	322	0.59	1.18	40,600	40,601	1.18	4,060	4,062	—	90,324	90,324	2.00	3.25	13.1	91,355
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2035	13.2	13.1	12.0	62.1	0.11	0.22	7,410	7,410	0.22	741	741	—	15,397	15,397	0.34	0.57	4.19	15,580
2036	13.2	13.1	11.7	61.1	0.11	0.22	7,430	7,430	0.22	743	743	—	15,304	15,304	0.34	0.57	3.59	15,487
2037	13.1	13.0	11.6	60.1	0.11	0.22	7,409	7,410	0.22	741	741	—	15,139	15,139	0.33	0.57	3.04	15,320

2038	13.0	13.0	11.4	59.4	0.11	0.22	7,409	7,410	0.22	741	741	—	15,051	15,051	0.33	0.54	2.57	15,222
2039	13.0	12.9	11.3	58.7	0.11	0.22	7,409	7,410	0.22	741	741	—	14,954	14,954	0.33	0.54	2.17	15,125

3. Construction Emissions Details

3.1. Demolition (2035) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.09	1.09	13.5	54.5	0.10	0.19	—	0.19	0.19	—	0.19	—	10,279	10,279	0.42	0.08	—	10,315
Demolition	—	—	—	—	—	—	0.03	0.03	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.09	1.09	13.5	54.5	0.10	0.19	—	0.19	0.19	—	0.19	—	10,279	10,279	0.42	0.08	—	10,315
Demolition	—	—	—	—	—	—	0.03	0.03	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.78	0.78	9.65	38.9	0.07	0.14	—	0.14	0.14	—	0.14	—	7,342	7,342	0.30	0.06	—	7,368
Demolition	—	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.14	1.76	7.11	0.01	0.02	—	0.02	0.02	—	0.02	—	1,216	1,216	0.05	0.01	—	1,220
Demolition	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.16	0.14	0.10	2.49	0.00	0.00	627	627	0.00	62.6	62.6	—	601	601	0.01	< 0.005	0.83	603
Vendor	0.01	0.01	0.29	0.12	< 0.005	0.01	90.1	90.1	0.01	9.01	9.01	—	289	289	< 0.005	0.04	0.17	301
Hauling	< 0.005	< 0.005	0.12	0.03	< 0.005	< 0.005	29.5	29.5	< 0.005	2.94	2.95	—	108	108	< 0.005	0.02	0.12	114
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.12	0.12	1.40	0.00	0.00	627	627	0.00	62.6	62.6	—	510	510	0.01	< 0.005	0.02	511
Vendor	0.01	0.01	0.32	0.13	< 0.005	0.01	90.1	90.1	0.01	9.01	9.01	—	289	289	< 0.005	0.04	< 0.005	301
Hauling	< 0.005	< 0.005	0.14	0.03	< 0.005	< 0.005	29.5	29.5	< 0.005	2.94	2.95	—	109	109	< 0.005	0.02	< 0.005	114
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.09	0.08	1.26	0.00	0.00	442	442	0.00	44.1	44.1	—	391	391	< 0.005	< 0.005	0.25	392
Vendor	0.01	0.01	0.22	0.09	< 0.005	< 0.005	63.5	63.5	< 0.005	6.35	6.35	—	206	206	< 0.005	0.03	0.05	215
Hauling	< 0.005	< 0.005	0.09	0.02	< 0.005	< 0.005	20.8	20.8	< 0.005	2.08	2.08	—	77.5	77.5	< 0.005	0.01	0.04	81.3

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.23	0.00	0.00	80.6	80.6	0.00	8.05	8.05	—	64.7	64.7	< 0.005	< 0.005	0.04	64.9
Vendor	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	34.2	34.2	< 0.005	< 0.005	0.01	35.6
Hauling	< 0.005	< 0.005	0.02	< 0.005	< 0.005	< 0.005	3.79	3.79	< 0.005	0.38	0.38	—	12.8	12.8	< 0.005	< 0.005	0.01	13.5

3.3. Demolition (2036) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.09	1.09	13.5	54.5	0.10	0.19	—	0.19	0.19	—	0.19	—	10,279	10,279	0.42	0.08	—	10,314
Demolition	—	—	—	—	—	—	0.03	0.03	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.09	1.09	13.5	54.5	0.10	0.19	—	0.19	0.19	—	0.19	—	10,279	10,279	0.42	0.08	—	10,314
Demolition	—	—	—	—	—	—	0.03	0.03	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.78	0.78	9.68	39.0	0.07	0.14	—	0.14	0.14	—	0.14	—	7,362	7,362	0.30	0.06	—	7,387
Demolition	—	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.14	1.77	7.13	0.01	0.02	—	0.02	0.02	—	0.02	—	1,219	1,219	0.05	0.01	—	1,223
Demolition	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.14	0.13	0.10	2.35	0.00	0.00	627	627	0.00	62.6	62.6	—	595	595	< 0.005	< 0.005	0.72	597
Vendor	0.01	0.01	0.28	0.12	< 0.005	0.01	90.1	90.1	0.01	9.01	9.01	—	282	282	< 0.005	0.04	0.13	294
Hauling	< 0.005	< 0.005	0.12	0.03	< 0.005	< 0.005	29.5	29.5	< 0.005	2.94	2.95	—	107	107	< 0.005	0.02	0.11	112
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.12	0.10	1.31	0.00	0.00	627	627	0.00	62.6	62.6	—	505	505	0.01	< 0.005	0.02	506
Vendor	0.01	0.01	0.31	0.12	< 0.005	0.01	90.1	90.1	0.01	9.01	9.01	—	282	282	< 0.005	0.04	< 0.005	294
Hauling	< 0.005	< 0.005	0.13	0.03	< 0.005	< 0.005	29.5	29.5	< 0.005	2.94	2.95	—	107	107	< 0.005	0.02	< 0.005	112
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.09	0.07	1.19	0.00	0.00	443	443	0.00	44.2	44.2	—	388	388	< 0.005	< 0.005	0.22	389
Vendor	0.01	0.01	0.22	0.09	< 0.005	< 0.005	63.7	63.7	< 0.005	6.37	6.37	—	202	202	< 0.005	0.03	0.04	211
Hauling	< 0.005	< 0.005	0.09	0.02	< 0.005	< 0.005	20.8	20.8	< 0.005	2.08	2.08	—	76.7	76.7	< 0.005	0.01	0.03	80.5

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.22	0.00	0.00	80.8	80.8	0.00	8.07	8.07	—	64.2	64.2	< 0.005	< 0.005	0.04	64.4
Vendor	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	33.4	33.4	< 0.005	< 0.005	0.01	34.9
Hauling	< 0.005	< 0.005	0.02	< 0.005	< 0.005	< 0.005	3.80	3.80	< 0.005	0.38	0.38	—	12.7	12.7	< 0.005	< 0.005	0.01	13.3

3.5. Demolition (2037) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.09	1.09	13.5	54.5	0.10	0.19	—	0.19	0.19	—	0.19	—	10,278	10,278	0.42	0.08	—	10,313
Demolition	—	—	—	—	—	—	0.03	0.03	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.09	1.09	13.5	54.5	0.10	0.19	—	0.19	0.19	—	0.19	—	10,278	10,278	0.42	0.08	—	10,313
Demolition	—	—	—	—	—	—	0.03	0.03	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.78	0.78	9.65	38.9	0.07	0.14	—	0.14	0.14	—	0.14	—	7,341	7,341	0.30	0.06	—	7,367
Demolition	—	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.14	1.76	7.11	0.01	0.02	—	0.02	0.02	—	0.02	—	1,215	1,215	0.05	0.01	—	1,220
Demolition	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.13	0.13	0.08	2.22	0.00	0.00	627	627	0.00	62.6	62.6	—	589	589	< 0.005	< 0.005	0.63	591
Vendor	0.01	0.01	0.28	0.12	< 0.005	0.01	90.1	90.1	0.01	9.01	9.01	—	276	276	< 0.005	0.04	0.10	288
Hauling	< 0.005	< 0.005	0.12	0.03	< 0.005	< 0.005	29.5	29.5	< 0.005	2.94	2.95	—	106	106	< 0.005	0.02	0.09	111
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.11	0.10	1.24	0.00	0.00	627	627	0.00	62.6	62.6	—	500	500	0.01	< 0.005	0.02	501
Vendor	0.01	0.01	0.31	0.12	< 0.005	0.01	90.1	90.1	0.01	9.01	9.01	—	276	276	< 0.005	0.04	< 0.005	288
Hauling	< 0.005	< 0.005	0.13	0.03	< 0.005	< 0.005	29.5	29.5	< 0.005	2.94	2.95	—	106	106	< 0.005	0.02	< 0.005	111
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.07	1.13	0.00	0.00	442	442	0.00	44.1	44.1	—	383	383	< 0.005	< 0.005	0.19	384
Vendor	0.01	0.01	0.21	0.09	< 0.005	< 0.005	63.5	63.5	< 0.005	6.35	6.35	—	197	197	< 0.005	0.03	0.03	205
Hauling	< 0.005	< 0.005	0.09	0.02	< 0.005	< 0.005	20.8	20.8	< 0.005	2.08	2.08	—	75.7	75.7	< 0.005	0.01	0.03	79.3

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.01	0.21	0.00	0.00	80.6	80.6	0.00	8.05	8.05	—	63.4	63.4	< 0.005	< 0.005	0.03	63.6
Vendor	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	32.6	32.6	< 0.005	< 0.005	0.01	34.0
Hauling	< 0.005	< 0.005	0.02	< 0.005	< 0.005	< 0.005	3.79	3.79	< 0.005	0.38	0.38	—	12.5	12.5	< 0.005	< 0.005	< 0.005	13.1

3.7. Demolition (2038) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.09	1.09	13.5	54.5	0.10	0.19	—	0.19	0.19	—	0.19	—	10,279	10,279	0.42	0.08	—	10,314
Demolition	—	—	—	—	—	—	0.03	0.03	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.09	1.09	13.5	54.5	0.10	0.19	—	0.19	0.19	—	0.19	—	10,279	10,279	0.42	0.08	—	10,314
Demolition	—	—	—	—	—	—	0.03	0.03	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.78	0.78	9.65	38.9	0.07	0.14	—	0.14	0.14	—	0.14	—	7,342	7,342	0.30	0.06	—	7,367
Demolition	—	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.14	1.76	7.11	0.01	0.02	—	0.02	0.02	—	0.02	—	1,216	1,216	0.05	0.01	—	1,220
Demolition	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.12	0.08	2.14	0.00	0.00	627	627	0.00	62.6	62.6	—	586	586	< 0.005	< 0.005	0.54	587
Vendor	0.01	0.01	0.27	0.11	< 0.005	0.01	90.1	90.1	0.01	9.01	9.01	—	270	270	< 0.005	0.04	0.08	281
Hauling	< 0.005	< 0.005	0.12	0.03	< 0.005	< 0.005	29.5	29.5	< 0.005	2.94	2.95	—	105	105	< 0.005	0.02	0.08	110
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.10	0.10	1.19	0.00	0.00	627	627	0.00	62.6	62.6	—	497	497	0.01	< 0.005	0.01	498
Vendor	0.01	0.01	0.30	0.12	< 0.005	0.01	90.1	90.1	0.01	9.01	9.01	—	271	271	< 0.005	0.04	< 0.005	282
Hauling	< 0.005	< 0.005	0.13	0.03	< 0.005	< 0.005	29.5	29.5	< 0.005	2.94	2.95	—	105	105	< 0.005	0.02	< 0.005	110
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.05	1.08	0.00	0.00	442	442	0.00	44.1	44.1	—	381	381	< 0.005	< 0.005	0.17	382
Vendor	0.01	0.01	0.21	0.08	< 0.005	< 0.005	63.5	63.5	< 0.005	6.35	6.35	—	193	193	< 0.005	0.03	0.02	201
Hauling	< 0.005	< 0.005	0.09	0.02	< 0.005	< 0.005	20.8	20.8	< 0.005	2.08	2.08	—	75.1	75.1	< 0.005	0.01	0.02	78.6

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.20	0.00	0.00	80.6	80.6	0.00	8.05	8.05	—	63.1	63.1	< 0.005	< 0.005	0.03	63.2
Vendor	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	32.0	32.0	< 0.005	< 0.005	< 0.005	33.3
Hauling	< 0.005	< 0.005	0.02	< 0.005	< 0.005	< 0.005	3.79	3.79	< 0.005	0.38	0.38	—	12.4	12.4	< 0.005	< 0.005	< 0.005	13.0

3.9. Demolition (2039) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.09	1.09	13.5	54.5	0.10	0.19	—	0.19	0.19	—	0.19	—	10,278	10,278	0.42	0.08	—	10,313
Demolition	—	—	—	—	—	—	0.03	0.03	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.09	1.09	13.5	54.5	0.10	0.19	—	0.19	0.19	—	0.19	—	10,278	10,278	0.42	0.08	—	10,313
Demolition	—	—	—	—	—	—	0.03	0.03	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.78	0.78	9.65	38.9	0.07	0.14	—	0.14	0.14	—	0.14	—	7,341	7,341	0.30	0.06	—	7,367
Demolition	—	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.14	1.76	7.11	0.01	0.02	—	0.02	0.02	—	0.02	—	1,215	1,215	0.05	0.01	—	1,220
Demolition	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.11	0.08	2.04	0.00	0.00	627	627	0.00	62.6	62.6	—	581	581	< 0.005	< 0.005	0.46	583
Vendor	0.01	0.01	0.27	0.11	< 0.005	0.01	90.1	90.1	0.01	9.01	9.01	—	265	265	< 0.005	0.04	0.06	277
Hauling	< 0.005	< 0.005	0.12	0.03	< 0.005	< 0.005	29.5	29.5	< 0.005	2.94	2.95	—	104	104	< 0.005	0.02	0.07	109
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.10	0.08	1.14	0.00	0.00	627	627	0.00	62.6	62.6	—	493	493	0.01	< 0.005	0.01	494
Vendor	0.01	0.01	0.30	0.12	< 0.005	0.01	90.1	90.1	0.01	9.01	9.01	—	266	266	< 0.005	0.04	< 0.005	277
Hauling	< 0.005	< 0.005	0.13	0.03	< 0.005	< 0.005	29.5	29.5	< 0.005	2.94	2.95	—	104	104	< 0.005	0.02	< 0.005	109
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.05	1.03	0.00	0.00	442	442	0.00	44.1	44.1	—	378	378	< 0.005	< 0.005	0.14	379
Vendor	0.01	0.01	0.21	0.08	< 0.005	< 0.005	63.5	63.5	< 0.005	6.35	6.35	—	190	190	< 0.005	0.03	0.02	198
Hauling	< 0.005	< 0.005	0.09	0.02	< 0.005	< 0.005	20.8	20.8	< 0.005	2.08	2.08	—	74.5	74.5	< 0.005	0.01	0.02	78.1

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.19	0.00	0.00	80.6	80.6	0.00	8.05	8.05	—	62.6	62.6	< 0.005	< 0.005	0.02	62.7
Vendor	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	31.4	31.4	< 0.005	< 0.005	< 0.005	32.7
Hauling	< 0.005	< 0.005	0.02	< 0.005	< 0.005	< 0.005	3.79	3.79	< 0.005	0.38	0.38	—	12.3	12.3	< 0.005	< 0.005	< 0.005	12.9

3.11. Site Preparation (2035) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.49	1.49	7.77	84.9	0.15	0.30	—	0.30	0.30	—	0.30	—	15,888	15,888	0.64	0.13	—	15,943
Dust From Material Movement	—	—	—	—	—	—	15.3	15.3	—	7.88	7.88	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.49	1.49	7.77	84.9	0.15	0.30	—	0.30	0.30	—	0.30	—	15,888	15,888	0.64	0.13	—	15,943
Dust From Material Movement	—	—	—	—	—	—	15.3	15.3	—	7.88	7.88	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.07	1.07	5.55	60.7	0.10	0.21	—	0.21	0.21	—	0.21	—	11,349	11,349	0.46	0.09	—	11,388
Dust From Material Movement	—	—	—	—	—	—	11.0	11.0	—	5.63	5.63	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.19	0.19	1.01	11.1	0.02	0.04	—	0.04	0.04	—	0.04	—	1,879	1,879	0.08	0.02	—	1,885
Dust From Material Movement	—	—	—	—	—	—	2.00	2.00	—	1.03	1.03	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.19	0.16	0.12	2.93	0.00	0.00	736	736	0.00	73.4	73.4	—	706	706	0.01	< 0.005	0.97	708
Vendor	0.01	0.01	0.29	0.12	< 0.005	0.01	90.1	90.1	0.01	9.01	9.01	—	289	289	< 0.005	0.04	0.17	301
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.14	0.14	0.14	1.64	0.00	0.00	736	736	0.00	73.4	73.4	—	599	599	0.01	< 0.005	0.03	600
Vendor	0.01	0.01	0.32	0.13	< 0.005	0.01	90.1	90.1	0.01	9.01	9.01	—	289	289	< 0.005	0.04	< 0.005	301

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.10	0.10	1.48	0.00	0.00	518	518	0.00	51.8	51.8	—	459	459	< 0.005	< 0.005	0.30	460
Vendor	0.01	0.01	0.22	0.09	< 0.005	< 0.005	63.5	63.5	< 0.005	6.35	6.35	—	206	206	< 0.005	0.03	0.05	215
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.27	0.00	0.00	94.6	94.6	0.00	9.45	9.45	—	76.0	76.0	< 0.005	< 0.005	0.05	76.2
Vendor	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	34.2	34.2	< 0.005	< 0.005	0.01	35.6
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Site Preparation (2036) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.49	1.49	7.77	84.9	0.15	0.30	—	0.30	0.30	—	0.30	—	15,888	15,888	0.64	0.13	—	15,943
Dust From Material Movement	—	—	—	—	—	—	15.3	15.3	—	7.88	7.88	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	1.49	1.49	7.77	84.9	0.15	0.30	—	0.30	0.30	—	0.30	—	15,888	15,888	0.64	0.13	—	15,943
Dust From Material Movement	—	—	—	—	—	—	15.3	15.3	—	7.88	7.88	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.07	1.07	5.56	60.8	0.11	0.21	—	0.21	0.21	—	0.21	—	11,380	11,380	0.46	0.09	—	11,419
Dust From Material Movement	—	—	—	—	—	—	11.0	11.0	—	5.64	5.64	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.20	0.20	1.02	11.1	0.02	0.04	—	0.04	0.04	—	0.04	—	1,884	1,884	0.08	0.02	—	1,890
Dust From Material Movement	—	—	—	—	—	—	2.00	2.00	—	1.03	1.03	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.16	0.16	0.11	2.76	0.00	0.00	736	736	0.00	73.4	73.4	—	698	698	< 0.005	< 0.005	0.84	701

Vendor	0.01	0.01	0.28	0.12	< 0.005	0.01	90.1	90.1	0.01	9.01	9.01	—	282	282	< 0.005	0.04	0.13	294
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.14	0.14	0.11	1.53	0.00	0.00	736	736	0.00	73.4	73.4	—	592	592	0.01	< 0.005	0.02	594
Vendor	0.01	0.01	0.31	0.12	< 0.005	0.01	90.1	90.1	0.01	9.01	9.01	—	282	282	< 0.005	0.04	< 0.005	294
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.10	0.08	1.40	0.00	0.00	520	520	0.00	51.9	51.9	—	456	456	< 0.005	< 0.005	0.26	457
Vendor	0.01	0.01	0.22	0.09	< 0.005	< 0.005	63.7	63.7	< 0.005	6.37	6.37	—	202	202	< 0.005	0.03	0.04	211
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.26	0.00	0.00	94.9	94.9	0.00	9.47	9.47	—	75.4	75.4	< 0.005	< 0.005	0.04	75.6
Vendor	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	33.4	33.4	< 0.005	< 0.005	0.01	34.9
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.15. Site Preparation (2037) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.49	1.49	7.77	84.9	0.15	0.30	—	0.30	0.30	—	0.30	—	15,887	15,887	0.64	0.13	—	15,942

Dust From Material Movement	—	—	—	—	—	—	15.3	15.3	—	7.88	7.88	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.49	1.49	7.77	84.9	0.15	0.30	—	0.30	0.30	—	0.30	—	15,887	15,887	0.64	0.13	—	15,942
Dust From Material Movement	—	—	—	—	—	—	15.3	15.3	—	7.88	7.88	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.07	1.07	5.55	60.7	0.10	0.21	—	0.21	0.21	—	0.21	—	11,348	11,348	0.46	0.09	—	11,387
Dust From Material Movement	—	—	—	—	—	—	11.0	11.0	—	5.63	5.63	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.19	0.19	1.01	11.1	0.02	0.04	—	0.04	0.04	—	0.04	—	1,879	1,879	0.08	0.02	—	1,885

Dust From Material Movement	—	—	—	—	—	—	2.00	2.00	—	1.03	1.03	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.15	0.15	0.09	2.61	0.00	0.00	736	736	0.00	73.4	73.4	—	692	692	< 0.005	< 0.005	0.73	693
Vendor	0.01	0.01	0.28	0.12	< 0.005	0.01	90.1	90.1	0.01	9.01	9.01	—	276	276	< 0.005	0.04	0.10	288
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.13	0.13	0.11	1.45	0.00	0.00	736	736	0.00	73.4	73.4	—	587	587	0.01	< 0.005	0.02	588
Vendor	0.01	0.01	0.31	0.12	< 0.005	0.01	90.1	90.1	0.01	9.01	9.01	—	276	276	< 0.005	0.04	< 0.005	288
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.10	0.08	1.32	0.00	0.00	518	518	0.00	51.8	51.8	—	450	450	< 0.005	< 0.005	0.23	451
Vendor	0.01	0.01	0.21	0.09	< 0.005	< 0.005	63.5	63.5	< 0.005	6.35	6.35	—	197	197	< 0.005	0.03	0.03	205
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.24	0.00	0.00	94.6	94.6	0.00	9.45	9.45	—	74.5	74.5	< 0.005	< 0.005	0.04	74.7
Vendor	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	32.6	32.6	< 0.005	< 0.005	0.01	34.0
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.17. Site Preparation (2038) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.49	1.49	7.77	84.9	0.15	0.30	—	0.30	0.30	—	0.30	—	15,888	15,888	0.64	0.13	—	15,943
Dust From Material Movement	—	—	—	—	—	—	15.3	15.3	—	7.88	7.88	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.49	1.49	7.77	84.9	0.15	0.30	—	0.30	0.30	—	0.30	—	15,888	15,888	0.64	0.13	—	15,943
Dust From Material Movement	—	—	—	—	—	—	15.3	15.3	—	7.88	7.88	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.07	1.07	5.55	60.7	0.10	0.21	—	0.21	0.21	—	0.21	—	11,349	11,349	0.46	0.09	—	11,388
Dust From Material Movement	—	—	—	—	—	—	11.0	11.0	—	5.63	5.63	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.19	0.19	1.01	11.1	0.02	0.04	—	0.04	0.04	—	0.04	—	1,879	1,879	0.08	0.02	—	1,885
Dust From Material Movement	—	—	—	—	—	—	2.00	2.00	—	1.03	1.03	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.14	0.14	0.09	2.51	0.00	0.00	736	736	0.00	73.4	73.4	—	688	688	< 0.005	< 0.005	0.64	690
Vendor	0.01	0.01	0.27	0.11	< 0.005	0.01	90.1	90.1	0.01	9.01	9.01	—	270	270	< 0.005	0.04	0.08	281
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.13	0.12	0.11	1.39	0.00	0.00	736	736	0.00	73.4	73.4	—	584	584	0.01	< 0.005	0.02	585
Vendor	0.01	0.01	0.30	0.12	< 0.005	0.01	90.1	90.1	0.01	9.01	9.01	—	271	271	< 0.005	0.04	< 0.005	282
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.09	0.06	1.27	0.00	0.00	518	518	0.00	51.8	51.8	—	447	447	< 0.005	< 0.005	0.20	448
Vendor	0.01	0.01	0.21	0.08	< 0.005	< 0.005	63.5	63.5	< 0.005	6.35	6.35	—	193	193	< 0.005	0.03	0.02	201
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.23	0.00	0.00	94.6	94.6	0.00	9.45	9.45	—	74.1	74.1	< 0.005	< 0.005	0.03	74.2

Vendor	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	32.0	32.0	< 0.005	< 0.005	< 0.005	33.3
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.19. Site Preparation (2039) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.49	1.49	7.77	84.9	0.15	0.30	—	0.30	0.30	—	0.30	—	15,888	15,888	0.64	0.13	—	15,943
Dust From Material Movement	—	—	—	—	—	—	15.3	15.3	—	7.88	7.88	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.49	1.49	7.77	84.9	0.15	0.30	—	0.30	0.30	—	0.30	—	15,888	15,888	0.64	0.13	—	15,943
Dust From Material Movement	—	—	—	—	—	—	15.3	15.3	—	7.88	7.88	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	1.07	1.07	5.55	60.7	0.10	0.21	—	0.21	0.21	—	0.21	—	11,349	11,349	0.46	0.09	—	11,388
Dust From Material Movement	—	—	—	—	—	—	11.0	11.0	—	5.63	5.63	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.19	0.19	1.01	11.1	0.02	0.04	—	0.04	0.04	—	0.04	—	1,879	1,879	0.08	0.02	—	1,885
Dust From Material Movement	—	—	—	—	—	—	2.00	2.00	—	1.03	1.03	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.14	0.13	0.09	2.39	0.00	0.00	736	736	0.00	73.4	73.4	—	682	682	< 0.005	< 0.005	0.54	684
Vendor	0.01	0.01	0.27	0.11	< 0.005	0.01	90.1	90.1	0.01	9.01	9.01	—	265	265	< 0.005	0.04	0.06	277
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.12	0.09	1.34	0.00	0.00	736	736	0.00	73.4	73.4	—	579	579	0.01	< 0.005	0.01	580
Vendor	0.01	0.01	0.30	0.12	< 0.005	0.01	90.1	90.1	0.01	9.01	9.01	—	266	266	< 0.005	0.04	< 0.005	277
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.09	0.06	1.21	0.00	0.00	518	518	0.00	51.8	51.8	—	444	444	< 0.005	< 0.005	0.17	445

Vendor	0.01	0.01	0.21	0.08	< 0.005	< 0.005	63.5	63.5	< 0.005	6.35	6.35	—	190	190	< 0.005	0.03	0.02	198
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.22	0.00	0.00	94.6	94.6	0.00	9.45	9.45	—	73.5	73.5	< 0.005	< 0.005	0.03	73.6
Vendor	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	31.4	31.4	< 0.005	< 0.005	< 0.005	32.7
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.21. Grading (2035) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.92	1.92	13.3	106	0.18	0.37	—	0.37	0.37	—	0.37	—	19,788	19,788	0.80	0.16	—	19,856
Dust From Material Movement	—	—	—	—	—	—	7.18	7.18	—	2.85	2.85	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.92	1.92	13.3	106	0.18	0.37	—	0.37	0.37	—	0.37	—	19,788	19,788	0.80	0.16	—	19,856

Dust From Material Movement	—	—	—	—	—	—	7.18	7.18	—	2.85	2.85	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.37	1.37	9.48	75.7	0.13	0.27	—	0.27	0.27	—	0.27	—	14,135	14,135	0.57	0.11	—	14,183
Dust From Material Movement	—	—	—	—	—	—	5.13	5.13	—	2.04	2.04	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.25	0.25	1.73	13.8	0.02	0.05	—	0.05	0.05	—	0.05	—	2,340	2,340	0.09	0.02	—	2,348
Dust From Material Movement	—	—	—	—	—	—	0.94	0.94	—	0.37	0.37	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.21	0.18	0.13	3.25	0.00	0.00	817	817	0.00	81.6	81.6	—	784	784	0.01	< 0.005	1.08	787
Vendor	0.01	0.01	0.29	0.12	< 0.005	0.01	90.1	90.1	0.01	9.01	9.01	—	289	289	< 0.005	0.04	0.17	301
Hauling	0.05	0.03	1.48	0.40	0.01	0.03	354	354	0.03	35.3	35.4	—	1,302	1,302	0.01	0.21	1.44	1,365

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.16	0.15	0.15	1.82	0.00	0.00	817	817	0.00	81.6	81.6	—	665	665	0.01	< 0.005	0.03	666
Vendor	0.01	0.01	0.32	0.13	< 0.005	0.01	90.1	90.1	0.01	9.01	9.01	—	289	289	< 0.005	0.04	< 0.005	301
Hauling	0.05	0.03	1.62	0.41	0.01	0.03	354	354	0.03	35.3	35.4	—	1,303	1,303	0.01	0.21	0.04	1,365
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.12	0.11	1.65	0.00	0.00	576	576	0.00	57.5	57.5	—	510	510	< 0.005	< 0.005	0.33	511
Vendor	0.01	0.01	0.22	0.09	< 0.005	< 0.005	63.5	63.5	< 0.005	6.35	6.35	—	206	206	< 0.005	0.03	0.05	215
Hauling	0.03	0.02	1.14	0.29	0.01	0.02	249	249	0.02	24.9	24.9	—	930	930	0.01	0.15	0.44	975
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.30	0.00	0.00	105	105	0.00	10.5	10.5	—	84.4	84.4	< 0.005	< 0.005	0.06	84.7
Vendor	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	34.2	34.2	< 0.005	< 0.005	0.01	35.6
Hauling	0.01	< 0.005	0.21	0.05	< 0.005	< 0.005	45.5	45.5	< 0.005	4.55	4.55	—	154	154	< 0.005	0.02	0.07	161

3.23. Grading (2036) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.92	1.92	13.3	106	0.18	0.37	—	0.37	0.37	—	0.37	—	19,788	19,788	0.80	0.16	—	19,856
Dust From Material Movement	—	—	—	—	—	—	7.18	7.18	—	2.85	2.85	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.92	1.92	13.3	106	0.18	0.37	—	0.37	0.37	—	0.37	—	19,788	19,788	0.80	0.16	—	19,856
Dust From Material Movement	—	—	—	—	—	—	7.18	7.18	—	2.85	2.85	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.37	1.37	9.51	76.0	0.13	0.27	—	0.27	0.27	—	0.27	—	14,173	14,173	0.57	0.11	—	14,222
Dust From Material Movement	—	—	—	—	—	—	5.14	5.14	—	2.04	2.04	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.25	0.25	1.74	13.9	0.02	0.05	—	0.05	0.05	—	0.05	—	2,347	2,347	0.10	0.02	—	2,355
Dust From Material Movement	—	—	—	—	—	—	0.94	0.94	—	0.37	0.37	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.18	0.18	0.13	3.06	0.00	0.00	817	817	0.00	81.6	81.6	—	776	776	0.01	< 0.005	0.94	778
Vendor	0.01	0.01	0.28	0.12	< 0.005	0.01	90.1	90.1	0.01	9.01	9.01	—	282	282	< 0.005	0.04	0.13	294
Hauling	0.05	0.03	1.45	0.39	0.01	0.03	354	354	0.03	35.3	35.4	—	1,285	1,285	0.01	0.21	1.26	1,349
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.15	0.15	0.13	1.70	0.00	0.00	817	817	0.00	81.6	81.6	—	658	658	0.01	< 0.005	0.02	660
Vendor	0.01	0.01	0.31	0.12	< 0.005	0.01	90.1	90.1	0.01	9.01	9.01	—	282	282	< 0.005	0.04	< 0.005	294
Hauling	0.05	0.03	1.60	0.40	0.01	0.03	354	354	0.03	35.3	35.4	—	1,286	1,286	0.01	0.21	0.03	1,349
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.11	0.09	1.55	0.00	0.00	578	578	0.00	57.7	57.7	—	506	506	< 0.005	< 0.005	0.29	507
Vendor	0.01	0.01	0.22	0.09	< 0.005	< 0.005	63.7	63.7	< 0.005	6.37	6.37	—	202	202	< 0.005	0.03	0.04	211
Hauling	0.03	0.02	1.13	0.28	0.01	0.02	250	250	0.02	25.0	25.0	—	921	921	0.01	0.15	0.39	966
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.28	0.00	0.00	105	105	0.00	10.5	10.5	—	83.8	83.8	< 0.005	< 0.005	0.05	84.0
Vendor	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	33.4	33.4	< 0.005	< 0.005	0.01	34.9
Hauling	0.01	< 0.005	0.21	0.05	< 0.005	< 0.005	45.6	45.6	< 0.005	4.56	4.56	—	152	152	< 0.005	0.02	0.06	160

3.25. Grading (2037) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	1.92	1.92	13.3	106	0.18	0.37	—	0.37	0.37	—	0.37	—	19,788	19,788	0.80	0.16	—	19,856
Dust From Material Movement	—	—	—	—	—	—	7.18	7.18	—	2.85	2.85	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.92	1.92	13.3	106	0.18	0.37	—	0.37	0.37	—	0.37	—	19,788	19,788	0.80	0.16	—	19,856
Dust From Material Movement	—	—	—	—	—	—	7.18	7.18	—	2.85	2.85	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.37	1.37	9.48	75.7	0.13	0.27	—	0.27	0.27	—	0.27	—	14,134	14,134	0.57	0.11	—	14,183
Dust From Material Movement	—	—	—	—	—	—	5.13	5.13	—	2.04	2.04	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.25	0.25	1.73	13.8	0.02	0.05	—	0.05	0.05	—	0.05	—	2,340	2,340	0.09	0.02	—	2,348

Dust From Material Movement	—	—	—	—	—	—	0.94	0.94	—	0.37	0.37	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.17	0.17	0.10	2.90	0.00	0.00	817	817	0.00	81.6	81.6	—	768	768	0.01	< 0.005	0.82	771
Vendor	0.01	0.01	0.28	0.12	< 0.005	0.01	90.1	90.1	0.01	9.01	9.01	—	276	276	< 0.005	0.04	0.10	288
Hauling	0.05	0.03	1.44	0.38	0.01	0.03	354	354	0.03	35.3	35.4	—	1,271	1,271	0.01	0.20	1.11	1,332
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.14	0.14	0.13	1.61	0.00	0.00	817	817	0.00	81.6	81.6	—	652	652	0.01	< 0.005	0.02	653
Vendor	0.01	0.01	0.31	0.12	< 0.005	0.01	90.1	90.1	0.01	9.01	9.01	—	276	276	< 0.005	0.04	< 0.005	288
Hauling	0.05	0.03	1.59	0.39	0.01	0.03	354	354	0.03	35.3	35.4	—	1,273	1,273	0.01	0.20	0.03	1,332
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.11	0.09	1.47	0.00	0.00	576	576	0.00	57.5	57.5	—	500	500	< 0.005	< 0.005	0.25	501
Vendor	0.01	0.01	0.21	0.09	< 0.005	< 0.005	63.5	63.5	< 0.005	6.35	6.35	—	197	197	< 0.005	0.03	0.03	205
Hauling	0.03	0.02	1.12	0.27	0.01	0.02	249	249	0.02	24.9	24.9	—	909	909	0.01	0.14	0.34	951
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.27	0.00	0.00	105	105	0.00	10.5	10.5	—	82.7	82.7	< 0.005	< 0.005	0.04	82.9
Vendor	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	32.6	32.6	< 0.005	< 0.005	0.01	34.0
Hauling	0.01	< 0.005	0.20	0.05	< 0.005	< 0.005	45.5	45.5	< 0.005	4.55	4.55	—	150	150	< 0.005	0.02	0.06	157

3.27. Grading (2038) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.92	1.92	13.3	106	0.18	0.37	—	0.37	0.37	—	0.37	—	19,788	19,788	0.80	0.16	—	19,856
Dust From Material Movement	—	—	—	—	—	—	7.18	7.18	—	2.85	2.85	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.92	1.92	13.3	106	0.18	0.37	—	0.37	0.37	—	0.37	—	19,788	19,788	0.80	0.16	—	19,856
Dust From Material Movement	—	—	—	—	—	—	7.18	7.18	—	2.85	2.85	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.37	1.37	9.48	75.7	0.13	0.27	—	0.27	0.27	—	0.27	—	14,135	14,135	0.57	0.11	—	14,183
Dust From Material Movement	—	—	—	—	—	—	5.13	5.13	—	2.04	2.04	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.25	0.25	1.73	13.8	0.02	0.05	—	0.05	0.05	—	0.05	—	2,340	2,340	0.09	0.02	—	2,348
Dust From Material Movement	—	—	—	—	—	—	0.94	0.94	—	0.37	0.37	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.16	0.16	0.10	2.79	0.00	0.00	817	817	0.00	81.6	81.6	—	764	764	0.01	< 0.005	0.71	766
Vendor	0.01	0.01	0.27	0.11	< 0.005	0.01	90.1	90.1	0.01	9.01	9.01	—	270	270	< 0.005	0.04	0.08	281
Hauling	0.05	0.03	1.44	0.38	0.01	0.03	354	354	0.03	35.3	35.4	—	1,261	1,261	0.01	0.20	0.97	1,321
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.14	0.14	0.13	1.55	0.00	0.00	817	817	0.00	81.6	81.6	—	648	648	0.01	< 0.005	0.02	650
Vendor	0.01	0.01	0.30	0.12	< 0.005	0.01	90.1	90.1	0.01	9.01	9.01	—	271	271	< 0.005	0.04	< 0.005	282
Hauling	0.05	0.03	1.58	0.39	0.01	0.03	354	354	0.03	35.3	35.4	—	1,262	1,262	0.01	0.20	0.03	1,322
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.10	0.07	1.41	0.00	0.00	576	576	0.00	57.5	57.5	—	497	497	< 0.005	< 0.005	0.22	498
Vendor	0.01	0.01	0.21	0.08	< 0.005	< 0.005	63.5	63.5	< 0.005	6.35	6.35	—	193	193	< 0.005	0.03	0.02	201
Hauling	0.03	0.02	1.11	0.27	0.01	0.02	249	249	0.02	24.9	24.9	—	901	901	0.01	0.14	0.30	944
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.26	0.00	0.00	105	105	0.00	10.5	10.5	—	82.3	82.3	< 0.005	< 0.005	0.04	82.5

Vendor	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	32.0	32.0	< 0.005	< 0.005	< 0.005	33.3
Hauling	0.01	< 0.005	0.20	0.05	< 0.005	< 0.005	45.5	45.5	< 0.005	4.55	4.55	—	149	149	< 0.005	0.02	0.05	156

3.29. Grading (2039) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.92	1.92	13.3	106	0.18	0.37	—	0.37	0.37	—	0.37	—	19,788	19,788	0.80	0.16	—	19,856
Dust From Material Movement	—	—	—	—	—	—	7.18	7.18	—	2.85	2.85	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.92	1.92	13.3	106	0.18	0.37	—	0.37	0.37	—	0.37	—	19,788	19,788	0.80	0.16	—	19,856
Dust From Material Movement	—	—	—	—	—	—	7.18	7.18	—	2.85	2.85	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	1.37	1.37	9.48	75.7	0.13	0.27	—	0.27	0.27	—	0.27	—	14,135	14,135	0.57	0.11	—	14,183
Dust From Material Movement	—	—	—	—	—	—	5.13	5.13	—	2.04	2.04	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.25	0.25	1.73	13.8	0.02	0.05	—	0.05	0.05	—	0.05	—	2,340	2,340	0.09	0.02	—	2,348
Dust From Material Movement	—	—	—	—	—	—	0.94	0.94	—	0.37	0.37	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.15	0.15	0.10	2.65	0.00	0.00	817	817	0.00	81.6	81.6	—	758	758	0.01	< 0.005	0.61	760
Vendor	0.01	0.01	0.27	0.11	< 0.005	0.01	90.1	90.1	0.01	9.01	9.01	—	265	265	< 0.005	0.04	0.06	277
Hauling	0.05	0.03	1.43	0.38	0.01	0.03	354	354	0.03	35.3	35.4	—	1,252	1,252	0.01	0.20	0.84	1,312
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.13	0.13	0.10	1.48	0.00	0.00	817	817	0.00	81.6	81.6	—	643	643	0.01	< 0.005	0.02	645
Vendor	0.01	0.01	0.30	0.12	< 0.005	0.01	90.1	90.1	0.01	9.01	9.01	—	266	266	< 0.005	0.04	< 0.005	277
Hauling	0.05	0.03	1.57	0.39	0.01	0.03	354	354	0.03	35.3	35.4	—	1,253	1,253	0.01	0.20	0.02	1,312
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.10	0.07	1.35	0.00	0.00	576	576	0.00	57.5	57.5	—	493	493	< 0.005	< 0.005	0.19	494

Vendor	0.01	0.01	0.21	0.08	< 0.005	< 0.005	63.5	63.5	< 0.005	6.35	6.35	—	190	190	< 0.005	0.03	0.02	198
Hauling	0.03	0.02	1.10	0.27	0.01	0.02	249	249	0.02	24.9	24.9	—	895	895	0.01	0.14	0.26	937
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.25	0.00	0.00	105	105	0.00	10.5	10.5	—	81.6	81.6	< 0.005	< 0.005	0.03	81.8
Vendor	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	31.4	31.4	< 0.005	< 0.005	< 0.005	32.7
Hauling	0.01	< 0.005	0.20	0.05	< 0.005	< 0.005	45.5	45.5	< 0.005	4.55	4.55	—	148	148	< 0.005	0.02	0.04	155

3.31. Building Construction (2035) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.78	0.78	8.78	46.9	0.07	0.14	—	0.14	0.14	—	0.14	—	7,435	7,435	0.30	0.06	—	7,461
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.78	0.78	8.78	46.9	0.07	0.14	—	0.14	0.14	—	0.14	—	7,435	7,435	0.30	0.06	—	7,461
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.56	0.56	6.27	33.5	0.05	0.10	—	0.10	0.10	—	0.10	—	5,311	5,311	0.22	0.04	—	5,329
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.10	1.15	6.12	0.01	0.02	—	0.02	0.02	—	0.02	—	879	879	0.04	0.01	—	882
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	9.78	8.52	5.97	151	0.00	0.00	38,002	38,002	0.00	3,794	3,794	—	36,471	36,471	0.31	0.18	50.1	36,584
Vendor	1.13	0.96	26.8	11.2	0.25	0.50	8,337	8,338	0.50	833	834	—	26,714	26,714	0.12	3.69	15.9	27,832
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	7.29	7.10	7.10	84.8	0.00	0.00	38,002	38,002	0.00	3,794	3,794	—	30,927	30,927	0.37	0.18	1.30	30,992
Vendor	1.03	0.84	29.4	11.7	0.25	0.50	8,337	8,338	0.50	833	834	—	26,747	26,747	0.12	3.69	0.41	27,851
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.47	5.38	5.03	76.7	0.00	0.00	26,788	26,788	0.00	2,675	2,675	—	23,716	23,716	0.22	0.13	15.5	23,776
Vendor	0.77	0.65	20.5	8.12	0.18	0.36	5,877	5,877	0.36	587	588	—	19,091	19,091	0.09	2.64	4.90	19,884
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.00	0.98	0.92	14.0	0.00	0.00	4,889	4,889	0.00	488	488	—	3,926	3,926	0.04	0.02	2.56	3,936

Vendor	0.14	0.12	3.74	1.48	0.03	0.07	1,073	1,073	0.07	107	107	—	3,161	3,161	0.01	0.44	0.81	3,292
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.33. Building Construction (2036) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.78	0.78	8.78	46.9	0.07	0.14	—	0.14	0.14	—	0.14	—	7,435	7,435	0.30	0.06	—	7,461
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.78	0.78	8.78	46.9	0.07	0.14	—	0.14	0.14	—	0.14	—	7,435	7,435	0.30	0.06	—	7,461
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.56	0.56	6.29	33.6	0.05	0.10	—	0.10	0.10	—	0.10	—	5,325	5,325	0.22	0.04	—	5,344
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.10	0.10	1.15	6.13	0.01	0.02	—	0.02	0.02	—	0.02	—	882	882	0.04	0.01	—	885
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	8.27	8.15	5.90	142	0.00	0.00	38,002	38,002	0.00	3,794	3,794	—	36,089	36,089	0.25	0.18	43.6	36,193
Vendor	1.13	0.96	26.2	10.9	0.25	0.50	8,337	8,338	0.50	833	834	—	26,068	26,068	0.12	3.69	12.4	27,183
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	7.10	6.98	5.90	79.2	0.00	0.00	38,002	38,002	0.00	3,794	3,794	—	30,610	30,610	0.31	0.18	1.13	30,674
Vendor	1.01	0.84	28.8	11.4	0.25	0.50	8,337	8,338	0.50	833	834	—	26,102	26,102	0.10	3.69	0.32	27,204
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.31	5.22	4.19	72.2	0.00	0.00	26,861	26,861	0.00	2,682	2,682	—	23,536	23,536	0.22	0.13	13.5	23,594
Vendor	0.77	0.65	20.1	7.94	0.18	0.36	5,893	5,894	0.36	589	589	—	18,681	18,681	0.07	2.64	3.81	19,474
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.97	0.95	0.76	13.2	0.00	0.00	4,902	4,902	0.00	489	489	—	3,897	3,897	0.04	0.02	2.24	3,906
Vendor	0.14	0.12	3.67	1.45	0.03	0.07	1,076	1,076	0.07	107	108	—	3,093	3,093	0.01	0.44	0.63	3,224
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.35. Building Construction (2037) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.78	0.78	8.78	46.9	0.07	0.14	—	0.14	0.14	—	0.14	—	7,435	7,435	0.30	0.06	—	7,461
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.78	0.78	8.78	46.9	0.07	0.14	—	0.14	0.14	—	0.14	—	7,435	7,435	0.30	0.06	—	7,461
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.56	0.56	6.27	33.5	0.05	0.10	—	0.10	0.10	—	0.10	—	5,311	5,311	0.22	0.04	—	5,329
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.10	1.15	6.12	0.01	0.02	—	0.02	0.02	—	0.02	—	879	879	0.04	0.01	—	882
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	7.84	7.78	4.77	135	0.00	0.00	38,002	38,002	0.00	3,794	3,794	—	35,732	35,732	0.25	0.18	37.9	35,831
Vendor	1.13	0.96	25.7	10.9	0.25	0.50	8,337	8,338	0.50	833	834	—	25,485	25,485	0.10	3.69	9.42	26,597
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	6.67	6.55	5.84	74.9	0.00	0.00	38,002	38,002	0.00	3,794	3,794	—	30,312	30,312	0.31	0.18	0.98	30,375
Vendor	1.01	0.84	28.2	11.3	0.25	0.50	8,337	8,338	0.50	833	834	—	25,520	25,520	0.10	3.69	0.24	26,622
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.03	4.94	4.13	68.3	0.00	0.00	26,788	26,788	0.00	2,675	2,675	—	23,241	23,241	0.18	0.13	11.7	23,296
Vendor	0.77	0.65	19.6	7.89	0.18	0.36	5,877	5,877	0.36	587	588	—	18,214	18,214	0.07	2.64	2.91	19,004
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.92	0.90	0.75	12.5	0.00	0.00	4,889	4,889	0.00	488	488	—	3,848	3,848	0.03	0.02	1.94	3,857
Vendor	0.14	0.12	3.58	1.44	0.03	0.07	1,073	1,073	0.07	107	107	—	3,016	3,016	0.01	0.44	0.48	3,146
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.37. Building Construction (2038) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.78	0.78	8.78	46.9	0.07	0.14	—	0.14	0.14	—	0.14	—	7,435	7,435	0.30	0.06	—	7,461

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.78	0.78	8.78	46.9	0.07	0.14	—	0.14	0.14	—	0.14	—	7,435	7,435	0.30	0.06	—	7,461
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.56	0.56	6.27	33.5	0.05	0.10	—	0.10	0.10	—	0.10	—	5,311	5,311	0.22	0.04	—	5,329
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.10	1.15	6.12	0.01	0.02	—	0.02	0.02	—	0.02	—	879	879	0.04	0.01	—	882
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	7.47	7.35	4.71	130	0.00	0.00	38,002	38,002	0.00	3,794	3,794	—	35,532	35,532	0.25	0.18	32.9	35,626
Vendor	1.11	0.93	25.3	10.6	0.25	0.50	8,337	8,338	0.50	833	834	—	25,002	25,002	0.10	3.44	7.10	26,036
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	6.49	6.37	5.84	72.0	0.00	0.00	38,002	38,002	0.00	3,794	3,794	—	30,148	30,148	0.31	0.18	0.85	30,211
Vendor	1.01	0.84	27.7	11.1	0.25	0.50	8,337	8,338	0.50	833	834	—	25,036	25,036	0.10	3.44	0.18	26,064
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.77	4.72	3.32	65.4	0.00	0.00	26,788	26,788	0.00	2,675	2,675	—	23,114	23,114	0.18	0.13	10.1	23,168
Vendor	0.77	0.65	19.4	7.71	0.18	0.36	5,877	5,877	0.36	587	588	—	17,869	17,869	0.07	2.46	2.19	18,605
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.87	0.86	0.61	11.9	0.00	0.00	4,889	4,889	0.00	488	488	—	3,827	3,827	0.03	0.02	1.68	3,836
Vendor	0.14	0.12	3.54	1.41	0.03	0.07	1,073	1,073	0.07	107	107	—	2,958	2,958	0.01	0.41	0.36	3,080
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.39. Building Construction (2039) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.78	0.78	8.78	46.9	0.07	0.14	—	0.14	0.14	—	0.14	—	7,435	7,435	0.30	0.06	—	7,461
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.78	0.78	8.78	46.9	0.07	0.14	—	0.14	0.14	—	0.14	—	7,435	7,435	0.30	0.06	—	7,461
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.56	0.56	6.27	33.5	0.05	0.10	—	0.10	0.10	—	0.10	—	5,311	5,311	0.22	0.04	—	5,329
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.10	1.15	6.12	0.01	0.02	—	0.02	0.02	—	0.02	—	879	879	0.04	0.01	—	882
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	6.98	6.86	4.64	123	0.00	0.00	38,002	38,002	0.00	3,794	3,794	—	35,247	35,247	0.25	0.18	28.2	35,336
Vendor	1.11	0.93	25.0	10.6	0.25	0.50	8,337	8,338	0.50	833	834	—	24,544	24,544	0.10	3.44	5.32	25,577
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	6.12	6.00	4.64	69.0	0.00	0.00	38,002	38,002	0.00	3,794	3,794	—	29,910	29,910	0.31	0.18	0.73	29,973
Vendor	1.01	0.84	27.3	11.0	0.25	0.50	8,337	8,338	0.50	833	834	—	24,579	24,579	0.10	3.44	0.14	25,607
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.59	4.50	3.27	62.6	0.00	0.00	26,788	26,788	0.00	2,675	2,675	—	22,930	22,930	0.18	0.13	8.71	22,983
Vendor	0.76	0.63	19.0	7.69	0.18	0.36	5,877	5,877	0.36	587	588	—	17,542	17,542	0.07	2.46	1.64	18,277
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.84	0.82	0.60	11.4	0.00	0.00	4,889	4,889	0.00	488	488	—	3,796	3,796	0.03	0.02	1.44	3,805
Vendor	0.14	0.12	3.47	1.40	0.03	0.07	1,073	1,073	0.07	107	107	—	2,904	2,904	0.01	0.41	0.27	3,026
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.41. Paving (2035) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.48	0.48	5.80	31.8	0.04	0.08	—	0.08	0.08	—	0.08	—	4,532	4,532	0.18	0.04	—	4,547
Paving	12.1	12.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.48	0.48	5.80	31.8	0.04	0.08	—	0.08	0.08	—	0.08	—	4,532	4,532	0.18	0.04	—	4,547
Paving	12.1	12.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.34	0.34	4.14	22.7	0.03	0.06	—	0.06	0.06	—	0.06	—	3,237	3,237	0.13	0.03	—	3,248
Paving	8.62	8.62	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	0.76	4.15	0.01	0.01	—	0.01	0.01	—	0.01	—	536	536	0.02	< 0.005	—	538
Paving	1.57	1.57	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.16	0.14	0.10	2.49	0.00	0.00	627	627	0.00	62.6	62.6	—	601	601	0.01	< 0.005	0.83	603
Vendor	0.01	0.01	0.29	0.12	< 0.005	0.01	90.1	90.1	0.01	9.01	9.01	—	289	289	< 0.005	0.04	0.17	301
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.12	0.12	1.40	0.00	0.00	627	627	0.00	62.6	62.6	—	510	510	0.01	< 0.005	0.02	511
Vendor	0.01	0.01	0.32	0.13	< 0.005	0.01	90.1	90.1	0.01	9.01	9.01	—	289	289	< 0.005	0.04	< 0.005	301
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.09	0.09	0.08	1.26	0.00	0.00	442	442	0.00	44.1	44.1	—	391	391	< 0.005	< 0.005	0.25	392
Vendor	0.01	0.01	0.22	0.09	< 0.005	< 0.005	63.5	63.5	< 0.005	6.35	6.35	—	206	206	< 0.005	0.03	0.05	215
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.23	0.00	0.00	80.6	80.6	0.00	8.05	8.05	—	64.7	64.7	< 0.005	< 0.005	0.04	64.9
Vendor	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	34.2	34.2	< 0.005	< 0.005	0.01	35.6
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.43. Paving (2036) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.48	0.48	5.80	31.8	0.04	0.08	—	0.08	0.08	—	0.08	—	4,532	4,532	0.18	0.04	—	4,547
Paving	12.1	12.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.48	0.48	5.80	31.8	0.04	0.08	—	0.08	0.08	—	0.08	—	4,532	4,532	0.18	0.04	—	4,547
Paving	12.1	12.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.34	0.34	4.15	22.8	0.03	0.06	—	0.06	0.06	—	0.06	—	3,246	3,246	0.13	0.03	—	3,257
Paving	8.64	8.64	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	0.76	4.16	0.01	0.01	—	0.01	0.01	—	0.01	—	537	537	0.02	< 0.005	—	539
Paving	1.58	1.58	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.14	0.13	0.10	2.35	0.00	0.00	627	627	0.00	62.6	62.6	—	595	595	< 0.005	< 0.005	0.72	597
Vendor	0.01	0.01	0.28	0.12	< 0.005	0.01	90.1	90.1	0.01	9.01	9.01	—	282	282	< 0.005	0.04	0.13	294
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.12	0.10	1.31	0.00	0.00	627	627	0.00	62.6	62.6	—	505	505	0.01	< 0.005	0.02	506
Vendor	0.01	0.01	0.31	0.12	< 0.005	0.01	90.1	90.1	0.01	9.01	9.01	—	282	282	< 0.005	0.04	< 0.005	294
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.09	0.07	1.19	0.00	0.00	443	443	0.00	44.2	44.2	—	388	388	< 0.005	< 0.005	0.22	389
Vendor	0.01	0.01	0.22	0.09	< 0.005	< 0.005	63.7	63.7	< 0.005	6.37	6.37	—	202	202	< 0.005	0.03	0.04	211

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.22	0.00	0.00	80.8	80.8	0.00	8.07	8.07	—	64.2	64.2	< 0.005	< 0.005	0.04	64.4
Vendor	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	33.4	33.4	< 0.005	< 0.005	0.01	34.9
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.45. Paving (2037) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.48	0.48	5.80	31.8	0.04	0.08	—	0.08	0.08	—	0.08	—	4,532	4,532	0.18	0.04	—	4,547
Paving	12.1	12.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.48	0.48	5.80	31.8	0.04	0.08	—	0.08	0.08	—	0.08	—	4,532	4,532	0.18	0.04	—	4,547
Paving	12.1	12.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.34	0.34	4.14	22.7	0.03	0.06	—	0.06	0.06	—	0.06	—	3,237	3,237	0.13	0.03	—	3,248
Paving	8.62	8.62	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	0.76	4.15	0.01	0.01	—	0.01	0.01	—	0.01	—	536	536	0.02	< 0.005	—	538
Paving	1.57	1.57	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.13	0.13	0.08	2.22	0.00	0.00	627	627	0.00	62.6	62.6	—	589	589	< 0.005	< 0.005	0.63	591
Vendor	0.01	0.01	0.28	0.12	< 0.005	0.01	90.1	90.1	0.01	9.01	9.01	—	276	276	< 0.005	0.04	0.10	288
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.11	0.10	1.24	0.00	0.00	627	627	0.00	62.6	62.6	—	500	500	0.01	< 0.005	0.02	501
Vendor	0.01	0.01	0.31	0.12	< 0.005	0.01	90.1	90.1	0.01	9.01	9.01	—	276	276	< 0.005	0.04	< 0.005	288
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.07	1.13	0.00	0.00	442	442	0.00	44.1	44.1	—	383	383	< 0.005	< 0.005	0.19	384
Vendor	0.01	0.01	0.21	0.09	< 0.005	< 0.005	63.5	63.5	< 0.005	6.35	6.35	—	197	197	< 0.005	0.03	0.03	205
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.02	0.01	0.01	0.21	0.00	0.00	80.6	80.6	0.00	8.05	8.05	—	63.4	63.4	< 0.005	< 0.005	0.03	63.6
Vendor	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	32.6	32.6	< 0.005	< 0.005	0.01	34.0
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.47. Paving (2038) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.48	0.48	5.80	31.8	0.04	0.08	—	0.08	0.08	—	0.08	—	4,532	4,532	0.18	0.04	—	4,547
Paving	12.1	12.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.48	0.48	5.80	31.8	0.04	0.08	—	0.08	0.08	—	0.08	—	4,532	4,532	0.18	0.04	—	4,547
Paving	12.1	12.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.34	0.34	4.14	22.7	0.03	0.06	—	0.06	0.06	—	0.06	—	3,237	3,237	0.13	0.03	—	3,248

Paving	8.62	8.62	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	0.76	4.15	0.01	0.01	—	0.01	0.01	—	0.01	—	536	536	0.02	< 0.005	—	538
Paving	1.57	1.57	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.12	0.08	2.14	0.00	0.00	627	627	0.00	62.6	62.6	—	586	586	< 0.005	< 0.005	0.54	587
Vendor	0.01	0.01	0.27	0.11	< 0.005	0.01	90.1	90.1	0.01	9.01	9.01	—	270	270	< 0.005	0.04	0.08	281
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.10	0.10	1.19	0.00	0.00	627	627	0.00	62.6	62.6	—	497	497	0.01	< 0.005	0.01	498
Vendor	0.01	0.01	0.30	0.12	< 0.005	0.01	90.1	90.1	0.01	9.01	9.01	—	271	271	< 0.005	0.04	< 0.005	282
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.05	1.08	0.00	0.00	442	442	0.00	44.1	44.1	—	381	381	< 0.005	< 0.005	0.17	382
Vendor	0.01	0.01	0.21	0.08	< 0.005	< 0.005	63.5	63.5	< 0.005	6.35	6.35	—	193	193	< 0.005	0.03	0.02	201
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.20	0.00	0.00	80.6	80.6	0.00	8.05	8.05	—	63.1	63.1	< 0.005	< 0.005	0.03	63.2
Vendor	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	32.0	32.0	< 0.005	< 0.005	< 0.005	33.3

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.49. Paving (2039) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.48	0.48	5.80	31.8	0.04	0.08	—	0.08	0.08	—	0.08	—	4,532	4,532	0.18	0.04	—	4,547
Paving	12.1	12.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.48	0.48	5.80	31.8	0.04	0.08	—	0.08	0.08	—	0.08	—	4,532	4,532	0.18	0.04	—	4,547
Paving	12.1	12.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.34	0.34	4.14	22.7	0.03	0.06	—	0.06	0.06	—	0.06	—	3,237	3,237	0.13	0.03	—	3,248
Paving	8.62	8.62	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	0.76	4.15	0.01	0.01	—	0.01	0.01	—	0.01	—	536	536	0.02	< 0.005	—	538
Paving	1.57	1.57	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.11	0.08	2.04	0.00	0.00	627	627	0.00	62.6	62.6	—	581	581	< 0.005	< 0.005	0.46	583
Vendor	0.01	0.01	0.27	0.11	< 0.005	0.01	90.1	90.1	0.01	9.01	9.01	—	265	265	< 0.005	0.04	0.06	277
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.10	0.08	1.14	0.00	0.00	627	627	0.00	62.6	62.6	—	493	493	0.01	< 0.005	0.01	494
Vendor	0.01	0.01	0.30	0.12	< 0.005	0.01	90.1	90.1	0.01	9.01	9.01	—	266	266	< 0.005	0.04	< 0.005	277
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.05	1.03	0.00	0.00	442	442	0.00	44.1	44.1	—	378	378	< 0.005	< 0.005	0.14	379
Vendor	0.01	0.01	0.21	0.08	< 0.005	< 0.005	63.5	63.5	< 0.005	6.35	6.35	—	190	190	< 0.005	0.03	0.02	198
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.19	0.00	0.00	80.6	80.6	0.00	8.05	8.05	—	62.6	62.6	< 0.005	< 0.005	0.02	62.7
Vendor	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	31.4	31.4	< 0.005	< 0.005	< 0.005	32.7
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.51. Architectural Coating (2035) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	1.94	2.89	0.01	0.01	—	0.01	0.01	—	0.01	—	401	401	0.02	< 0.005	—	402
Architectural Coatings	72.1	72.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	1.94	2.89	0.01	0.01	—	0.01	0.01	—	0.01	—	401	401	0.02	< 0.005	—	402
Architectural Coatings	72.1	72.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.05	1.38	2.06	< 0.005	0.01	—	0.01	0.01	—	0.01	—	286	286	0.01	< 0.005	—	287

Architect Coatings	51.5	51.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.25	0.38	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	47.4	47.4	< 0.005	< 0.005	—	47.5
Architectural Coatings	9.40	9.40	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.95	1.70	1.19	30.2	0.00	0.00	7,595	7,595	0.00	758	758	—	7,289	7,289	0.06	0.04	10.0	7,312
Vendor	0.01	0.01	0.29	0.12	< 0.005	0.01	90.1	90.1	0.01	9.01	9.01	—	289	289	< 0.005	0.04	0.17	301
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.46	1.42	1.42	16.9	0.00	0.00	7,595	7,595	0.00	758	758	—	6,181	6,181	0.07	0.04	0.26	6,194
Vendor	0.01	0.01	0.32	0.13	< 0.005	0.01	90.1	90.1	0.01	9.01	9.01	—	289	289	< 0.005	0.04	< 0.005	301
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.09	1.08	1.01	15.3	0.00	0.00	5,354	5,354	0.00	535	535	—	4,740	4,740	0.04	0.03	3.09	4,752
Vendor	0.01	0.01	0.22	0.09	< 0.005	< 0.005	63.5	63.5	< 0.005	6.35	6.35	—	206	206	< 0.005	0.03	0.05	215
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.20	0.20	0.18	2.80	0.00	0.00	977	977	0.00	97.6	97.6	—	785	785	0.01	< 0.005	0.51	787
Vendor	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	34.2	34.2	< 0.005	< 0.005	0.01	35.6
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.53. Architectural Coating (2036) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	1.94	2.89	0.01	0.01	—	0.01	0.01	—	0.01	—	401	401	0.02	< 0.005	—	402
Architectural Coatings	72.1	72.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	1.94	2.89	0.01	0.01	—	0.01	0.01	—	0.01	—	401	401	0.02	< 0.005	—	402
Architectural Coatings	72.1	72.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.05	1.39	2.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	287	287	0.01	< 0.005	—	288
Architectural Coatings	51.7	51.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.25	0.38	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	47.5	47.5	< 0.005	< 0.005	—	47.7
Architectural Coatings	9.43	9.43	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.65	1.63	1.18	28.5	0.00	0.00	7,595	7,595	0.00	758	758	—	7,213	7,213	0.05	0.04	8.72	7,234
Vendor	0.01	0.01	0.28	0.12	< 0.005	0.01	90.1	90.1	0.01	9.01	9.01	—	282	282	< 0.005	0.04	0.13	294
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.42	1.40	1.18	15.8	0.00	0.00	7,595	7,595	0.00	758	758	—	6,118	6,118	0.06	0.04	0.23	6,131
Vendor	0.01	0.01	0.31	0.12	< 0.005	0.01	90.1	90.1	0.01	9.01	9.01	—	282	282	< 0.005	0.04	< 0.005	294

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.06	1.04	0.84	14.4	0.00	0.00	5,369	5,369	0.00	536	536	—	4,704	4,704	0.04	0.03	2.70	4,716
Vendor	0.01	0.01	0.22	0.09	< 0.005	< 0.005	63.7	63.7	< 0.005	6.37	6.37	—	202	202	< 0.005	0.03	0.04	211
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.19	0.19	0.15	2.63	0.00	0.00	980	980	0.00	97.8	97.8	—	779	779	0.01	< 0.005	0.45	781
Vendor	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	33.4	33.4	< 0.005	< 0.005	0.01	34.9
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.55. Architectural Coating (2037) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	1.94	2.89	0.01	0.01	—	0.01	0.01	—	0.01	—	401	401	0.02	< 0.005	—	402
Architectural Coatings	72.1	72.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.06	0.06	1.94	2.89	0.01	0.01	—	0.01	0.01	—	0.01	—	401	401	0.02	< 0.005	—	402
Architectural Coatings	72.1	72.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.05	1.38	2.06	< 0.005	0.01	—	0.01	0.01	—	0.01	—	286	286	0.01	< 0.005	—	287
Architectural Coatings	51.5	51.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.25	0.38	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	47.4	47.4	< 0.005	< 0.005	—	47.5
Architectural Coatings	9.40	9.40	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.57	1.56	0.95	27.0	0.00	0.00	7,595	7,595	0.00	758	758	—	7,142	7,142	0.05	0.04	7.58	7,161

Vendor	0.01	0.01	0.28	0.12	< 0.005	0.01	90.1	90.1	0.01	9.01	9.01	—	276	276	< 0.005	0.04	0.10	288
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.33	1.31	1.17	15.0	0.00	0.00	7,595	7,595	0.00	758	758	—	6,058	6,058	0.06	0.04	0.20	6,071
Vendor	0.01	0.01	0.31	0.12	< 0.005	0.01	90.1	90.1	0.01	9.01	9.01	—	276	276	< 0.005	0.04	< 0.005	288
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.01	0.99	0.83	13.7	0.00	0.00	5,354	5,354	0.00	535	535	—	4,645	4,645	0.04	0.03	2.35	4,656
Vendor	0.01	0.01	0.21	0.09	< 0.005	< 0.005	63.5	63.5	< 0.005	6.35	6.35	—	197	197	< 0.005	0.03	0.03	205
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.18	0.18	0.15	2.49	0.00	0.00	977	977	0.00	97.6	97.6	—	769	769	0.01	< 0.005	0.39	771
Vendor	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	32.6	32.6	< 0.005	< 0.005	0.01	34.0
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.57. Architectural Coating (2038) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	1.94	2.89	0.01	0.01	—	0.01	0.01	—	0.01	—	401	401	0.02	< 0.005	—	402

Architectural Coatings	72.1	72.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	1.94	2.89	0.01	0.01	—	0.01	0.01	—	0.01	—	401	401	0.02	< 0.005	—	402
Architectural Coatings	72.1	72.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.05	1.38	2.06	< 0.005	0.01	—	0.01	0.01	—	0.01	—	286	286	0.01	< 0.005	—	287
Architectural Coatings	51.5	51.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.25	0.38	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	47.4	47.4	< 0.005	< 0.005	—	47.5

Architectural Coating	9.40	9.40	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.49	1.47	0.94	25.9	0.00	0.00	7,595	7,595	0.00	758	758	—	7,102	7,102	0.05	0.04	6.57	7,121
Vendor	0.01	0.01	0.27	0.11	< 0.005	0.01	90.1	90.1	0.01	9.01	9.01	—	270	270	< 0.005	0.04	0.08	281
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.30	1.27	1.17	14.4	0.00	0.00	7,595	7,595	0.00	758	758	—	6,025	6,025	0.06	0.04	0.17	6,038
Vendor	0.01	0.01	0.30	0.12	< 0.005	0.01	90.1	90.1	0.01	9.01	9.01	—	271	271	< 0.005	0.04	< 0.005	282
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.95	0.94	0.66	13.1	0.00	0.00	5,354	5,354	0.00	535	535	—	4,620	4,620	0.04	0.03	2.02	4,630
Vendor	0.01	0.01	0.21	0.08	< 0.005	< 0.005	63.5	63.5	< 0.005	6.35	6.35	—	193	193	< 0.005	0.03	0.02	201
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.17	0.17	0.12	2.39	0.00	0.00	977	977	0.00	97.6	97.6	—	765	765	0.01	< 0.005	0.33	767
Vendor	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	32.0	32.0	< 0.005	< 0.005	< 0.005	33.3
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.59. Architectural Coating (2039) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	1.94	2.89	0.01	0.01	—	0.01	0.01	—	0.01	—	401	401	0.02	< 0.005	—	402
Architectural Coatings	72.1	72.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	1.94	2.89	0.01	0.01	—	0.01	0.01	—	0.01	—	401	401	0.02	< 0.005	—	402
Architectural Coatings	72.1	72.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.05	1.38	2.06	< 0.005	0.01	—	0.01	0.01	—	0.01	—	286	286	0.01	< 0.005	—	287
Architectural Coatings	51.5	51.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.25	0.38	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	47.4	47.4	< 0.005	< 0.005	—	47.5
Architectural Coatings	9.40	9.40	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.40	1.37	0.93	24.7	0.00	0.00	7,595	7,595	0.00	758	758	—	7,045	7,045	0.05	0.04	5.63	7,063
Vendor	0.01	0.01	0.27	0.11	< 0.005	0.01	90.1	90.1	0.01	9.01	9.01	—	265	265	< 0.005	0.04	0.06	277
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.22	1.20	0.93	13.8	0.00	0.00	7,595	7,595	0.00	758	758	—	5,978	5,978	0.06	0.04	0.15	5,991
Vendor	0.01	0.01	0.30	0.12	< 0.005	0.01	90.1	90.1	0.01	9.01	9.01	—	266	266	< 0.005	0.04	< 0.005	277
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.92	0.90	0.65	12.5	0.00	0.00	5,354	5,354	0.00	535	535	—	4,583	4,583	0.04	0.03	1.74	4,593
Vendor	0.01	0.01	0.21	0.08	< 0.005	< 0.005	63.5	63.5	< 0.005	6.35	6.35	—	190	190	< 0.005	0.03	0.02	198
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.17	0.16	0.12	2.28	0.00	0.00	977	977	0.00	97.6	97.6	—	759	759	0.01	< 0.005	0.29	761

Vendor	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	31.4	31.4	< 0.005	< 0.005	< 0.005	32.7
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	1/1/2035	12/31/2039	5.00	1,305	—
Site Preparation	Site Preparation	1/1/2035	12/31/2039	5.00	1,305	—
Grading	Grading	1/1/2035	12/31/2039	5.00	1,305	—
Building Construction	Building Construction	1/1/2035	12/31/2039	5.00	1,305	—
Paving	Paving	1/1/2035	12/31/2039	5.00	1,305	—
Architectural Coating	Architectural Coating	1/1/2035	12/31/2039	5.00	1,305	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

Demolition	Rubber Tired Dozers	Diesel	Tier 4 Final	6.00	8.00	367	0.40
Demolition	Excavators	Diesel	Tier 4 Final	9.00	8.00	36.0	0.38
Demolition	Concrete/Industrial Saws	Diesel	Tier 4 Final	3.00	8.00	33.0	0.73
Site Preparation	Rubber Tired Dozers	Diesel	Tier 4 Final	9.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	12.0	8.00	84.0	0.37
Grading	Graders	Diesel	Tier 4 Final	3.00	8.00	148	0.41
Grading	Excavators	Diesel	Tier 4 Final	6.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	6.00	8.00	84.0	0.37
Grading	Scrapers	Diesel	Tier 4 Final	6.00	8.00	423	0.48
Grading	Rubber Tired Dozers	Diesel	Tier 4 Final	3.00	8.00	367	0.40
Building Construction	Forklifts	Diesel	Tier 4 Final	9.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Tier 4 Final	3.00	8.00	25.0	0.74
Building Construction	Cranes	Diesel	Tier 4 Final	3.00	7.00	367	0.29
Building Construction	Welders	Diesel	Tier 4 Final	3.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	9.00	7.00	84.0	0.37
Paving	Pavers	Diesel	Tier 4 Final	6.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Tier 4 Final	6.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Tier 4 Final	6.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Tier 4 Final	3.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	46.0	18.5	LDA,LDT1,LDT2

Demolition	Vendor	12.0	10.2	HHDT,MHDT
Demolition	Hauling	2.00	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	54.0	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	12.0	10.2	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	60.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	12.0	10.2	HHDT,MHDT
Grading	Hauling	24.0	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	2,790	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	1,110	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	46.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	12.0	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	558	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	12.0	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Control Strategies Applied	PM10 Reduction	PM2.5 Reduction
Water unpaved roads twice daily	74%	74%
Limit vehicle speeds on unpaved roads to 25 mph	44%	44%
Sweep paved roads once per month	9%	9%

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00	0.00	10,150,824	3,383,608	—

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (Building Square Footage)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	50,000	—
Site Preparation	—	—	5,873	0.00	—
Grading	125,000	125,000	11,745	0.00	—
Paving	0.00	0.00	0.00	0.00	6,009

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	3	74%	74%
Water Demolished Area	2	36%	36%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
General Office Building	361	100%
General Heavy Industry	1,925	100%
General Heavy Industry	1,196	100%
Manufacturing	603	100%
Manufacturing	1,922	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2035	0.00	457	0.03	< 0.005
2036	0.00	457	0.03	< 0.005
2037	0.00	457	0.03	< 0.005
2038	0.00	457	0.03	< 0.005
2039	0.00	457	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	32.8	annual days of extreme heat
Extreme Precipitation	0.00	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.19	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A

Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	11.6
AQ-PM	19.1
AQ-DPM	9.09
Drinking Water	30.6
Lead Risk Housing	50.8
Pesticides	90.5
Toxic Releases	7.58
Traffic	3.06
Effect Indicators	—
CleanUp Sites	74.2
Groundwater	77.9
Haz Waste Facilities/Generators	93.2
Impaired Water Bodies	100.0
Solid Waste	86.5
Sensitive Population	—
Asthma	87.6
Cardio-vascular	83.2
Low Birth Weights	26.9
Socioeconomic Factor Indicators	—
Education	82.7
Housing	51.4
Linguistic	88.8

Poverty	94.9
Unemployment	99.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	16.66880534
Employed	7.173104068
Median HI	5.299627871
Education	—
Bachelor's or higher	5.017323239
High school enrollment	16.8741178
Preschool enrollment	68.89516233
Transportation	—
Auto Access	18.40112922
Active commuting	51.10997049
Social	—
2-parent households	13.28114975
Voting	16.79712563
Neighborhood	—
Alcohol availability	70.25535737
Park access	33.85089183
Retail density	4.311561658
Supermarket access	49.58295907
Tree canopy	0.782753753
Housing	—
Homeownership	38.3036058

Housing habitability	30.96368536
Low-inc homeowner severe housing cost burden	26.76761196
Low-inc renter severe housing cost burden	52.89362248
Uncrowded housing	38.58591043
Health Outcomes	—
Insured adults	21.00603105
Arthritis	0.0
Asthma ER Admissions	30.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	41.7
Cognitively Disabled	50.3
Physically Disabled	19.5
Heart Attack ER Admissions	46.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	54.3
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0

Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	14.1
Elderly	42.0
English Speaking	18.7
Foreign-born	65.3
Outdoor Workers	5.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	85.8
Traffic Density	4.9
Traffic Access	23.0
Other Indices	—
Hardship	92.9
Other Decision Support	—
2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	82.0
Healthy Places Index Score for Project Location (b)	11.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Construction: Construction Phases	Land use data are based applicant-provided buildout assumptions. Phase 2 (2035-2039) represents 50% of 10-year buildout.
Construction: Off-Road Equipment	Equipment increased based on scaler per buildout methodology.
Construction: Trips and VMT	Trips increased based on scaler per buildout methodology.
Construction: On-Road Fugitive Dust	All roads used by future developments projects within the Specific Plan Area would be required to be paved. Per ICAPCD guidance a value of 85% paved is assumed in the modeling to account for the high levels of entrained dust generated from vehicle travel on paved roadways in the region. PM reductions altered based on dust control plan implementation strategies (watering unpaved roads three times per day).
Construction: Paving	Paved area acreages calculated based on buildout estimates. Conservatively assumed 100% asphalt.

Lithium Valley SP Construction - Phase 2 (2040-2044) Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Lithium Valley SP Construction - Phase 2 (2040-2044)
Construction Start Date	1/1/2040
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	4.80
Location	33.18829759139308, -115.6026869228474
County	Imperial
City	Unincorporated
Air District	Imperial County APCD
Air Basin	Salton Sea
TAZ	5600
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
General Office Building	541	1000sqft	12.4	541,032	54,102	—	—	—

General Heavy Industry	1,419	1000sqft	32.6	1,419,215	141,923	—	—	—
General Heavy Industry	1,181	1000sqft	27.1	1,181,183	118,117	—	—	—
Manufacturing	748	1000sqft	17.2	748,456	74,845	—	—	—
Manufacturing	2,877	1000sqft	66.1	2,877,330	287,731	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	99.7	99.4	84.6	491	0.82	1.65	57,597	57,598	1.65	5,760	5,762	—	129,690	129,690	2.80	4.55	35.8	131,151
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	98.6	96.8	87.2	423	0.82	1.65	57,597	57,598	1.65	5,760	5,762	—	122,985	122,985	2.80	4.55	0.93	124,411
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	70.8	70.6	61.8	320	0.59	1.18	40,711	40,712	1.18	4,072	4,073	—	90,055	90,055	2.00	3.26	11.1	91,087
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	12.9	12.9	11.3	58.4	0.11	0.22	7,430	7,430	0.22	743	743	—	14,910	14,910	0.33	0.54	1.83	15,080

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2040	99.7	99.4	84.6	491	0.82	1.65	57,597	57,598	1.65	5,760	5,762	—	129,690	129,690	2.80	4.55	35.8	131,151
2041	99.3	99.0	82.7	484	0.82	1.65	57,597	57,598	1.65	5,760	5,762	—	129,026	129,026	2.72	4.55	30.2	130,480
2042	98.9	97.2	82.4	480	0.82	1.65	57,597	57,598	1.65	5,760	5,762	—	128,433	128,433	2.71	4.55	25.4	129,881
2043	98.7	97.0	82.0	476	0.82	1.65	57,597	57,598	1.39	5,760	5,762	—	127,910	127,910	2.71	4.55	21.2	129,354
2044	98.5	96.8	82.0	473	0.82	1.65	57,597	57,598	1.39	5,760	5,762	—	127,468	127,468	2.71	4.55	17.8	128,909
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2040	98.6	96.8	87.2	423	0.82	1.65	57,597	57,598	1.65	5,760	5,762	—	122,985	122,985	2.80	4.55	0.93	124,411
2041	98.3	96.5	86.8	420	0.82	1.65	57,597	57,598	1.65	5,760	5,762	—	122,368	122,368	2.80	4.55	0.78	123,794
2042	98.1	96.4	86.5	418	0.82	1.65	57,597	57,598	1.65	5,760	5,762	—	121,819	121,819	2.79	4.55	0.66	123,245
2043	97.9	96.1	84.6	416	0.82	1.65	57,597	57,598	1.39	5,760	5,762	—	121,336	121,336	2.78	4.55	0.55	122,762
2044	96.3	96.0	84.6	414	0.82	1.65	57,597	57,598	1.39	5,760	5,762	—	120,925	120,925	2.78	4.55	0.46	122,350
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2040	70.8	70.6	61.8	320	0.59	1.18	40,711	40,712	1.18	4,072	4,073	—	90,055	90,055	2.00	3.26	11.1	91,087
2041	70.4	69.2	61.4	316	0.59	1.18	40,600	40,601	1.18	4,060	4,062	—	89,355	89,355	2.00	3.25	9.30	90,382
2042	70.2	69.0	60.3	313	0.59	1.18	40,600	40,601	1.18	4,060	4,062	—	88,949	88,949	1.93	3.25	7.81	89,974
2043	70.0	68.8	60.0	312	0.59	1.18	40,600	40,601	0.99	4,060	4,061	—	88,593	88,593	1.93	3.25	6.54	89,616
2044	70.1	68.9	59.9	312	0.59	1.18	40,711	40,712	0.99	4,072	4,073	—	88,532	88,532	1.94	3.26	5.51	89,557
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2040	12.9	12.9	11.3	58.4	0.11	0.22	7,430	7,430	0.22	743	743	—	14,910	14,910	0.33	0.54	1.83	15,080
2041	12.9	12.6	11.2	57.6	0.11	0.22	7,409	7,410	0.22	741	741	—	14,794	14,794	0.33	0.54	1.54	14,964
2042	12.8	12.6	11.0	57.2	0.11	0.22	7,409	7,410	0.22	741	741	—	14,727	14,727	0.32	0.54	1.29	14,896

2043	12.8	12.6	11.0	56.9	0.11	0.22	7,409	7,410	0.18	741	741	—	14,668	14,668	0.32	0.54	1.08	14,837
2044	12.8	12.6	10.9	56.9	0.11	0.22	7,430	7,430	0.18	743	743	—	14,658	14,658	0.32	0.54	0.91	14,827

3. Construction Emissions Details

3.1. Demolition (2040) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.09	1.09	13.5	54.5	0.10	0.19	—	0.19	0.19	—	0.19	—	10,278	10,278	0.42	0.08	—	10,313
Demolition	—	—	—	—	—	—	0.03	0.03	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.09	1.09	13.5	54.5	0.10	0.19	—	0.19	0.19	—	0.19	—	10,278	10,278	0.42	0.08	—	10,313
Demolition	—	—	—	—	—	—	0.03	0.03	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.78	0.78	9.68	39.0	0.07	0.14	—	0.14	0.14	—	0.14	—	7,361	7,361	0.30	0.06	—	7,386
Demolition	—	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.14	1.77	7.13	0.01	0.02	—	0.02	0.02	—	0.02	—	1,219	1,219	0.05	0.01	—	1,223
Demolition	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.11	0.08	1.97	0.00	0.00	627	627	0.00	62.6	62.6	—	577	577	< 0.005	< 0.005	0.40	578
Vendor	0.01	0.01	0.27	0.11	< 0.005	0.01	90.1	90.1	0.01	9.01	9.01	—	261	261	< 0.005	0.04	0.04	272
Hauling	< 0.005	< 0.005	0.12	0.03	< 0.005	< 0.005	29.5	29.5	< 0.005	2.94	2.95	—	104	104	< 0.005	0.02	0.06	109
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.08	0.08	1.09	0.00	0.00	627	627	0.00	62.6	62.6	—	490	490	< 0.005	< 0.005	0.01	491
Vendor	0.01	0.01	0.29	0.12	< 0.005	0.01	90.1	90.1	0.01	9.01	9.01	—	261	261	< 0.005	0.04	< 0.005	272
Hauling	< 0.005	< 0.005	0.13	0.03	< 0.005	< 0.005	29.5	29.5	< 0.005	2.94	2.95	—	104	104	< 0.005	0.02	< 0.005	109
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.05	1.00	0.00	0.00	443	443	0.00	44.2	44.2	—	376	376	< 0.005	< 0.005	0.12	377
Vendor	0.01	0.01	0.20	0.08	< 0.005	< 0.005	63.7	63.7	< 0.005	6.37	6.37	—	187	187	< 0.005	0.03	0.01	195
Hauling	< 0.005	< 0.005	0.09	0.02	< 0.005	< 0.005	20.8	20.8	< 0.005	2.08	2.08	—	74.3	74.3	< 0.005	0.01	0.02	77.8

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.18	0.00	0.00	80.8	80.8	0.00	8.07	8.07	—	62.3	62.3	< 0.005	< 0.005	0.02	62.5
Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	31.0	31.0	< 0.005	< 0.005	< 0.005	32.3
Hauling	< 0.005	< 0.005	0.02	< 0.005	< 0.005	< 0.005	3.80	3.80	< 0.005	0.38	0.38	—	12.3	12.3	< 0.005	< 0.005	< 0.005	12.9

3.3. Demolition (2041) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.09	1.09	13.5	54.5	0.10	0.19	—	0.19	0.19	—	0.19	—	10,278	10,278	0.42	0.08	—	10,314
Demolition	—	—	—	—	—	—	0.03	0.03	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.09	1.09	13.5	54.5	0.10	0.19	—	0.19	0.19	—	0.19	—	10,278	10,278	0.42	0.08	—	10,314
Demolition	—	—	—	—	—	—	0.03	0.03	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.78	0.78	9.65	38.9	0.07	0.14	—	0.14	0.14	—	0.14	—	7,342	7,342	0.30	0.06	—	7,367
Demolition	—	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.14	1.76	7.11	0.01	0.02	—	0.02	0.02	—	0.02	—	1,215	1,215	0.05	0.01	—	1,220
Demolition	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.10	0.06	1.89	0.00	0.00	627	627	0.00	62.6	62.6	—	573	573	< 0.005	< 0.005	0.34	575
Vendor	0.01	0.01	0.26	0.11	< 0.005	0.01	90.1	90.1	0.01	9.01	9.01	—	257	257	< 0.005	0.04	0.03	268
Hauling	< 0.005	< 0.005	0.12	0.03	< 0.005	< 0.005	29.5	29.5	< 0.005	2.94	2.95	—	103	103	< 0.005	0.02	0.05	108
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.07	0.08	1.05	0.00	0.00	627	627	0.00	62.6	62.6	—	487	487	< 0.005	< 0.005	0.01	488
Vendor	0.01	0.01	0.29	0.12	< 0.005	0.01	90.1	90.1	0.01	9.01	9.01	—	257	257	< 0.005	0.04	< 0.005	269
Hauling	< 0.005	< 0.005	0.13	0.03	< 0.005	< 0.005	29.5	29.5	< 0.005	2.94	2.95	—	103	103	< 0.005	0.02	< 0.005	108
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.05	0.05	0.96	0.00	0.00	442	442	0.00	44.1	44.1	—	373	373	< 0.005	< 0.005	0.11	374
Vendor	0.01	0.01	0.20	0.08	< 0.005	< 0.005	63.5	63.5	< 0.005	6.35	6.35	—	184	184	< 0.005	0.03	0.01	192
Hauling	< 0.005	< 0.005	0.09	0.02	< 0.005	< 0.005	20.8	20.8	< 0.005	2.08	2.08	—	73.7	73.7	< 0.005	0.01	0.02	77.3

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.17	0.00	0.00	80.6	80.6	0.00	8.05	8.05	—	61.8	61.8	< 0.005	< 0.005	0.02	61.9
Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	30.4	30.4	< 0.005	< 0.005	< 0.005	31.7
Hauling	< 0.005	< 0.005	0.02	< 0.005	< 0.005	< 0.005	3.79	3.79	< 0.005	0.38	0.38	—	12.2	12.2	< 0.005	< 0.005	< 0.005	12.8

3.5. Demolition (2042) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.09	1.09	13.5	54.5	0.10	0.19	—	0.19	0.19	—	0.19	—	10,278	10,278	0.42	0.08	—	10,314
Demolition	—	—	—	—	—	—	0.03	0.03	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.09	1.09	13.5	54.5	0.10	0.19	—	0.19	0.19	—	0.19	—	10,278	10,278	0.42	0.08	—	10,314
Demolition	—	—	—	—	—	—	0.03	0.03	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.78	0.78	9.65	38.9	0.07	0.14	—	0.14	0.14	—	0.14	—	7,342	7,342	0.30	0.06	—	7,367
Demolition	—	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.14	1.76	7.11	0.01	0.02	—	0.02	0.02	—	0.02	—	1,215	1,215	0.05	0.01	—	1,220
Demolition	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.08	0.06	1.83	0.00	0.00	627	627	0.00	62.6	62.6	—	570	570	< 0.005	< 0.005	0.29	571
Vendor	0.01	0.01	0.26	0.11	< 0.005	0.01	90.1	90.1	0.01	9.01	9.01	—	254	254	< 0.005	0.04	0.02	265
Hauling	< 0.005	< 0.005	0.12	0.03	< 0.005	< 0.005	29.5	29.5	< 0.005	2.94	2.95	—	103	103	< 0.005	0.02	0.05	108
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.07	0.08	1.02	0.00	0.00	627	627	0.00	62.6	62.6	—	484	484	< 0.005	< 0.005	0.01	485
Vendor	0.01	0.01	0.29	0.12	< 0.005	0.01	90.1	90.1	0.01	9.01	9.01	—	254	254	< 0.005	0.04	< 0.005	265
Hauling	< 0.005	< 0.005	0.13	0.03	< 0.005	< 0.005	29.5	29.5	< 0.005	2.94	2.95	—	103	103	< 0.005	0.02	< 0.005	108
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.05	0.04	0.92	0.00	0.00	442	442	0.00	44.1	44.1	—	371	371	< 0.005	< 0.005	0.09	372
Vendor	0.01	0.01	0.20	0.08	< 0.005	< 0.005	63.5	63.5	< 0.005	6.35	6.35	—	181	181	< 0.005	0.03	0.01	189
Hauling	< 0.005	< 0.005	0.09	0.02	< 0.005	< 0.005	20.8	20.8	< 0.005	2.08	2.08	—	73.4	73.4	< 0.005	0.01	0.01	76.9

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.17	0.00	0.00	80.6	80.6	0.00	8.05	8.05	—	61.4	61.4	< 0.005	< 0.005	0.01	61.6
Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	30.0	30.0	< 0.005	< 0.005	< 0.005	31.3
Hauling	< 0.005	< 0.005	0.02	< 0.005	< 0.005	< 0.005	3.79	3.79	< 0.005	0.38	0.38	—	12.2	12.2	< 0.005	< 0.005	< 0.005	12.7

3.7. Demolition (2043) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.09	1.09	13.5	54.5	0.10	0.19	—	0.19	0.19	—	0.19	—	10,278	10,278	0.42	0.08	—	10,313
Demolition	—	—	—	—	—	—	0.03	0.03	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.09	1.09	13.5	54.5	0.10	0.19	—	0.19	0.19	—	0.19	—	10,278	10,278	0.42	0.08	—	10,313
Demolition	—	—	—	—	—	—	0.03	0.03	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.78	0.78	9.65	38.9	0.07	0.14	—	0.14	0.14	—	0.14	—	7,341	7,341	0.30	0.06	—	7,366
Demolition	—	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.14	1.76	7.11	0.01	0.02	—	0.02	0.02	—	0.02	—	1,215	1,215	0.05	0.01	—	1,220
Demolition	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.08	0.06	1.78	0.00	0.00	627	627	0.00	62.6	62.6	—	567	567	< 0.005	< 0.005	0.25	568
Vendor	0.01	0.01	0.26	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	251	251	< 0.005	0.04	0.02	262
Hauling	< 0.005	< 0.005	0.12	0.03	< 0.005	< 0.005	29.5	29.5	< 0.005	2.94	2.95	—	102	102	< 0.005	0.02	0.04	107
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.07	0.06	1.00	0.00	0.00	627	627	0.00	62.6	62.6	—	482	482	< 0.005	< 0.005	0.01	483
Vendor	0.01	0.01	0.28	0.12	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	251	251	< 0.005	0.04	< 0.005	262
Hauling	< 0.005	< 0.005	0.13	0.03	< 0.005	< 0.005	29.5	29.5	< 0.005	2.94	2.95	—	103	103	< 0.005	0.02	< 0.005	107
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.04	0.91	0.00	0.00	442	442	0.00	44.1	44.1	—	369	369	< 0.005	< 0.005	0.08	370
Vendor	0.01	0.01	0.20	0.08	< 0.005	< 0.005	63.5	63.5	< 0.005	6.35	6.35	—	179	179	< 0.005	0.03	< 0.005	187
Hauling	< 0.005	< 0.005	0.09	0.02	< 0.005	< 0.005	20.8	20.8	< 0.005	2.08	2.08	—	73.2	73.2	< 0.005	0.01	0.01	76.7

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.17	0.00	0.00	80.6	80.6	0.00	8.05	8.05	—	61.1	61.1	< 0.005	< 0.005	0.01	61.2
Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	29.7	29.7	< 0.005	< 0.005	< 0.005	31.0
Hauling	< 0.005	< 0.005	0.02	< 0.005	< 0.005	< 0.005	3.79	3.79	< 0.005	0.38	0.38	—	12.1	12.1	< 0.005	< 0.005	< 0.005	12.7

3.9. Demolition (2044) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.09	1.09	13.5	54.5	0.10	0.19	—	0.19	0.19	—	0.19	—	10,278	10,278	0.42	0.08	—	10,314
Demolition	—	—	—	—	—	—	0.03	0.03	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.09	1.09	13.5	54.5	0.10	0.19	—	0.19	0.19	—	0.19	—	10,278	10,278	0.42	0.08	—	10,314
Demolition	—	—	—	—	—	—	0.03	0.03	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.78	0.78	9.68	39.0	0.07	0.14	—	0.14	0.14	—	0.14	—	7,362	7,362	0.30	0.06	—	7,387
Demolition	—	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.14	1.77	7.13	0.01	0.02	—	0.02	0.02	—	0.02	—	1,219	1,219	0.05	0.01	—	1,223
Demolition	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.07	0.06	1.74	0.00	0.00	627	627	0.00	62.6	62.6	—	565	565	< 0.005	< 0.005	0.21	566
Vendor	0.01	0.01	0.26	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	248	248	< 0.005	0.04	0.01	259
Hauling	< 0.005	< 0.005	0.12	0.03	< 0.005	< 0.005	29.5	29.5	< 0.005	2.94	2.95	—	102	102	< 0.005	0.02	0.03	107
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.06	0.97	0.00	0.00	627	627	0.00	62.6	62.6	—	480	480	< 0.005	< 0.005	0.01	481
Vendor	0.01	0.01	0.28	0.12	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	248	248	< 0.005	0.04	< 0.005	260
Hauling	< 0.005	< 0.005	0.13	0.03	< 0.005	< 0.005	29.5	29.5	< 0.005	2.94	2.95	—	102	102	< 0.005	0.02	< 0.005	107
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.04	0.89	0.00	0.00	443	443	0.00	44.2	44.2	—	369	369	< 0.005	< 0.005	0.07	369
Vendor	0.01	0.01	0.20	0.08	< 0.005	< 0.005	63.7	63.7	< 0.005	6.37	6.37	—	178	178	< 0.005	0.03	< 0.005	186
Hauling	< 0.005	< 0.005	0.09	0.02	< 0.005	< 0.005	20.8	20.8	< 0.005	2.08	2.08	—	73.2	73.2	< 0.005	0.01	0.01	76.7

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.16	0.00	0.00	80.8	80.8	0.00	8.07	8.07	—	61.0	61.0	< 0.005	< 0.005	0.01	61.1
Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	29.4	29.4	< 0.005	< 0.005	< 0.005	30.8
Hauling	< 0.005	< 0.005	0.02	< 0.005	< 0.005	< 0.005	3.80	3.80	< 0.005	0.38	0.38	—	12.1	12.1	< 0.005	< 0.005	< 0.005	12.7

3.11. Site Preparation (2040) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.49	1.49	7.77	84.9	0.15	0.30	—	0.30	0.30	—	0.30	—	15,887	15,887	0.64	0.13	—	15,942
Dust From Material Movement	—	—	—	—	—	—	15.3	15.3	—	7.88	7.88	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.49	1.49	7.77	84.9	0.15	0.30	—	0.30	0.30	—	0.30	—	15,887	15,887	0.64	0.13	—	15,942
Dust From Material Movement	—	—	—	—	—	—	15.3	15.3	—	7.88	7.88	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.07	1.07	5.56	60.8	0.11	0.21	—	0.21	0.21	—	0.21	—	11,379	11,379	0.46	0.09	—	11,418
Dust From Material Movement	—	—	—	—	—	—	11.0	11.0	—	5.64	5.64	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.20	0.20	1.02	11.1	0.02	0.04	—	0.04	0.04	—	0.04	—	1,884	1,884	0.08	0.02	—	1,890
Dust From Material Movement	—	—	—	—	—	—	2.00	2.00	—	1.03	1.03	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.13	0.13	0.09	2.31	0.00	0.00	736	736	0.00	73.4	73.4	—	677	677	< 0.005	< 0.005	0.47	679
Vendor	0.01	0.01	0.27	0.11	< 0.005	0.01	90.1	90.1	0.01	9.01	9.01	—	261	261	< 0.005	0.04	0.04	272
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.09	0.09	1.28	0.00	0.00	736	736	0.00	73.4	73.4	—	575	575	< 0.005	< 0.005	0.01	576
Vendor	0.01	0.01	0.29	0.12	< 0.005	0.01	90.1	90.1	0.01	9.01	9.01	—	261	261	< 0.005	0.04	< 0.005	272

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.06	1.18	0.00	0.00	520	520	0.00	51.9	51.9	—	442	442	< 0.005	< 0.005	0.15	443
Vendor	0.01	0.01	0.20	0.08	< 0.005	< 0.005	63.7	63.7	< 0.005	6.37	6.37	—	187	187	< 0.005	0.03	0.01	195
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.21	0.00	0.00	94.9	94.9	0.00	9.47	9.47	—	73.2	73.2	< 0.005	< 0.005	0.02	73.3
Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	31.0	31.0	< 0.005	< 0.005	< 0.005	32.3
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Site Preparation (2041) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.49	1.49	7.77	84.9	0.15	0.30	—	0.30	0.30	—	0.30	—	15,888	15,888	0.64	0.13	—	15,943
Dust From Material Movement	—	—	—	—	—	—	15.3	15.3	—	7.88	7.88	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	1.49	1.49	7.77	84.9	0.15	0.30	—	0.30	0.30	—	0.30	—	15,888	15,888	0.64	0.13	—	15,943
Dust From Material Movement	—	—	—	—	—	—	15.3	15.3	—	7.88	7.88	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.07	1.07	5.55	60.7	0.10	0.21	—	0.21	0.21	—	0.21	—	11,349	11,349	0.46	0.09	—	11,388
Dust From Material Movement	—	—	—	—	—	—	11.0	11.0	—	5.63	5.63	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.19	0.19	1.01	11.1	0.02	0.04	—	0.04	0.04	—	0.04	—	1,879	1,879	0.08	0.02	—	1,885
Dust From Material Movement	—	—	—	—	—	—	2.00	2.00	—	1.03	1.03	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.12	0.07	2.22	0.00	0.00	736	736	0.00	73.4	73.4	—	673	673	< 0.005	< 0.005	0.40	675

Vendor	0.01	0.01	0.26	0.11	< 0.005	0.01	90.1	90.1	0.01	9.01	9.01	—	257	257	< 0.005	0.04	0.03	268
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.08	0.09	1.23	0.00	0.00	736	736	0.00	73.4	73.4	—	571	571	< 0.005	< 0.005	0.01	573
Vendor	0.01	0.01	0.29	0.12	< 0.005	0.01	90.1	90.1	0.01	9.01	9.01	—	257	257	< 0.005	0.04	< 0.005	269
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.06	0.06	1.12	0.00	0.00	518	518	0.00	51.8	51.8	—	438	438	< 0.005	< 0.005	0.12	439
Vendor	0.01	0.01	0.20	0.08	< 0.005	< 0.005	63.5	63.5	< 0.005	6.35	6.35	—	184	184	< 0.005	0.03	0.01	192
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.20	0.00	0.00	94.6	94.6	0.00	9.45	9.45	—	72.5	72.5	< 0.005	< 0.005	0.02	72.7
Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	30.4	30.4	< 0.005	< 0.005	< 0.005	31.7
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.15. Site Preparation (2042) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.49	1.49	7.77	84.9	0.15	0.30	—	0.30	0.30	—	0.30	—	15,888	15,888	0.64	0.13	—	15,943

Dust From Material Movement	—	—	—	—	—	—	15.3	15.3	—	7.88	7.88	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.49	1.49	7.77	84.9	0.15	0.30	—	0.30	0.30	—	0.30	—	15,888	15,888	0.64	0.13	—	15,943
Dust From Material Movement	—	—	—	—	—	—	15.3	15.3	—	7.88	7.88	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.07	1.07	5.55	60.7	0.10	0.21	—	0.21	0.21	—	0.21	—	11,349	11,349	0.46	0.09	—	11,388
Dust From Material Movement	—	—	—	—	—	—	11.0	11.0	—	5.63	5.63	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.19	0.19	1.01	11.1	0.02	0.04	—	0.04	0.04	—	0.04	—	1,879	1,879	0.08	0.02	—	1,885

Dust From Material Movement	—	—	—	—	—	—	2.00	2.00	—	1.03	1.03	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.09	0.07	2.15	0.00	0.00	736	736	0.00	73.4	73.4	—	669	669	< 0.005	< 0.005	0.34	671
Vendor	0.01	0.01	0.26	0.11	< 0.005	0.01	90.1	90.1	0.01	9.01	9.01	—	254	254	< 0.005	0.04	0.02	265
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.08	0.09	1.20	0.00	0.00	736	736	0.00	73.4	73.4	—	568	568	< 0.005	< 0.005	0.01	569
Vendor	0.01	0.01	0.29	0.12	< 0.005	0.01	90.1	90.1	0.01	9.01	9.01	—	254	254	< 0.005	0.04	< 0.005	265
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.06	0.05	1.09	0.00	0.00	518	518	0.00	51.8	51.8	—	435	435	< 0.005	< 0.005	0.11	436
Vendor	0.01	0.01	0.20	0.08	< 0.005	< 0.005	63.5	63.5	< 0.005	6.35	6.35	—	181	181	< 0.005	0.03	0.01	189
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.20	0.00	0.00	94.6	94.6	0.00	9.45	9.45	—	72.1	72.1	< 0.005	< 0.005	0.02	72.3
Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	30.0	30.0	< 0.005	< 0.005	< 0.005	31.3
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.17. Site Preparation (2043) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.49	1.49	7.77	84.9	0.15	0.30	—	0.30	0.30	—	0.30	—	15,887	15,887	0.64	0.13	—	15,942
Dust From Material Movement	—	—	—	—	—	—	15.3	15.3	—	7.88	7.88	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.49	1.49	7.77	84.9	0.15	0.30	—	0.30	0.30	—	0.30	—	15,887	15,887	0.64	0.13	—	15,942
Dust From Material Movement	—	—	—	—	—	—	15.3	15.3	—	7.88	7.88	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.07	1.07	5.55	60.7	0.10	0.21	—	0.21	0.21	—	0.21	—	11,348	11,348	0.46	0.09	—	11,387
Dust From Material Movement	—	—	—	—	—	—	11.0	11.0	—	5.63	5.63	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.19	0.19	1.01	11.1	0.02	0.04	—	0.04	0.04	—	0.04	—	1,879	1,879	0.08	0.02	—	1,885
Dust From Material Movement	—	—	—	—	—	—	2.00	2.00	—	1.03	1.03	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.09	0.07	2.10	0.00	0.00	736	736	0.00	73.4	73.4	—	666	666	< 0.005	< 0.005	0.29	667
Vendor	0.01	0.01	0.26	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	251	251	< 0.005	0.04	0.02	262
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.08	0.07	1.17	0.00	0.00	736	736	0.00	73.4	73.4	—	565	565	< 0.005	< 0.005	0.01	567
Vendor	0.01	0.01	0.28	0.12	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	251	251	< 0.005	0.04	< 0.005	262
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.05	1.07	0.00	0.00	518	518	0.00	51.8	51.8	—	433	433	< 0.005	< 0.005	0.09	434
Vendor	0.01	0.01	0.20	0.08	< 0.005	< 0.005	63.5	63.5	< 0.005	6.35	6.35	—	179	179	< 0.005	0.03	< 0.005	187
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.19	0.00	0.00	94.6	94.6	0.00	9.45	9.45	—	71.7	71.7	< 0.005	< 0.005	0.01	71.9

Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	29.7	29.7	< 0.005	< 0.005	< 0.005	31.0
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.19. Site Preparation (2044) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.49	1.49	7.77	84.9	0.15	0.30	—	0.30	0.30	—	0.30	—	15,888	15,888	0.64	0.13	—	15,943
Dust From Material Movement	—	—	—	—	—	—	15.3	15.3	—	7.88	7.88	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.49	1.49	7.77	84.9	0.15	0.30	—	0.30	0.30	—	0.30	—	15,888	15,888	0.64	0.13	—	15,943
Dust From Material Movement	—	—	—	—	—	—	15.3	15.3	—	7.88	7.88	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	1.07	1.07	5.56	60.8	0.11	0.21	—	0.21	0.21	—	0.21	—	11,380	11,380	0.46	0.09	—	11,419
Dust From Material Movement	—	—	—	—	—	—	11.0	11.0	—	5.64	5.64	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.20	0.20	1.02	11.1	0.02	0.04	—	0.04	0.04	—	0.04	—	1,884	1,884	0.08	0.02	—	1,890
Dust From Material Movement	—	—	—	—	—	—	2.00	2.00	—	1.03	1.03	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.09	0.07	2.05	0.00	0.00	736	736	0.00	73.4	73.4	—	663	663	< 0.005	< 0.005	0.25	664
Vendor	0.01	0.01	0.26	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	248	248	< 0.005	0.04	0.01	259
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.07	1.14	0.00	0.00	736	736	0.00	73.4	73.4	—	563	563	< 0.005	< 0.005	0.01	564
Vendor	0.01	0.01	0.28	0.12	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	248	248	< 0.005	0.04	< 0.005	260
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.05	1.05	0.00	0.00	520	520	0.00	51.9	51.9	—	433	433	< 0.005	< 0.005	0.08	434

Vendor	0.01	0.01	0.20	0.08	< 0.005	< 0.005	63.7	63.7	< 0.005	6.37	6.37	—	178	178	< 0.005	0.03	< 0.005	186
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.19	0.00	0.00	94.9	94.9	0.00	9.47	9.47	—	71.6	71.6	< 0.005	< 0.005	0.01	71.8
Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	29.4	29.4	< 0.005	< 0.005	< 0.005	30.8
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.21. Grading (2040) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.92	1.92	13.3	106	0.18	0.37	—	0.37	0.37	—	0.37	—	19,788	19,788	0.80	0.16	—	19,856
Dust From Material Movement	—	—	—	—	—	—	7.18	7.18	—	2.85	2.85	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.92	1.92	13.3	106	0.18	0.37	—	0.37	0.37	—	0.37	—	19,788	19,788	0.80	0.16	—	19,856

Dust From Material Movement	—	—	—	—	—	—	7.18	7.18	—	2.85	2.85	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.37	1.37	9.51	76.0	0.13	0.27	—	0.27	0.27	—	0.27	—	14,173	14,173	0.57	0.11	—	14,222
Dust From Material Movement	—	—	—	—	—	—	5.14	5.14	—	2.04	2.04	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.25	0.25	1.74	13.9	0.02	0.05	—	0.05	0.05	—	0.05	—	2,347	2,347	0.10	0.02	—	2,355
Dust From Material Movement	—	—	—	—	—	—	0.94	0.94	—	0.37	0.37	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.14	0.14	0.10	2.57	0.00	0.00	817	817	0.00	81.6	81.6	—	753	753	0.01	< 0.005	0.52	754
Vendor	0.01	0.01	0.27	0.11	< 0.005	0.01	90.1	90.1	0.01	9.01	9.01	—	261	261	< 0.005	0.04	0.04	272
Hauling	0.05	0.03	1.42	0.37	0.01	0.03	354	354	0.03	35.3	35.4	—	1,244	1,244	0.01	0.20	0.73	1,304

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.13	0.10	0.10	1.42	0.00	0.00	817	817	0.00	81.6	81.6	—	639	639	0.01	< 0.005	0.01	640
Vendor	0.01	0.01	0.29	0.12	< 0.005	0.01	90.1	90.1	0.01	9.01	9.01	—	261	261	< 0.005	0.04	< 0.005	272
Hauling	0.05	0.03	1.56	0.38	0.01	0.03	354	354	0.03	35.3	35.4	—	1,245	1,245	0.01	0.20	0.02	1,305
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.09	0.07	1.31	0.00	0.00	578	578	0.00	57.7	57.7	—	491	491	< 0.005	< 0.005	0.16	492
Vendor	0.01	0.01	0.20	0.08	< 0.005	< 0.005	63.7	63.7	< 0.005	6.37	6.37	—	187	187	< 0.005	0.03	0.01	195
Hauling	0.03	0.02	1.10	0.27	0.01	0.02	250	250	0.02	25.0	25.0	—	892	892	0.01	0.14	0.23	934
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.24	0.00	0.00	105	105	0.00	10.5	10.5	—	81.3	81.3	< 0.005	< 0.005	0.03	81.5
Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	31.0	31.0	< 0.005	< 0.005	< 0.005	32.3
Hauling	0.01	< 0.005	0.20	0.05	< 0.005	< 0.005	45.6	45.6	< 0.005	4.56	4.56	—	148	148	< 0.005	0.02	0.04	155

3.23. Grading (2041) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.92	1.92	13.3	106	0.18	0.37	—	0.37	0.37	—	0.37	—	19,788	19,788	0.80	0.16	—	19,856
Dust From Material Movement	—	—	—	—	—	—	7.18	7.18	—	2.85	2.85	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.92	1.92	13.3	106	0.18	0.37	—	0.37	0.37	—	0.37	—	19,788	19,788	0.80	0.16	—	19,856
Dust From Material Movement	—	—	—	—	—	—	7.18	7.18	—	2.85	2.85	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.37	1.37	9.48	75.7	0.13	0.27	—	0.27	0.27	—	0.27	—	14,135	14,135	0.57	0.11	—	14,183
Dust From Material Movement	—	—	—	—	—	—	5.13	5.13	—	2.04	2.04	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.25	0.25	1.73	13.8	0.02	0.05	—	0.05	0.05	—	0.05	—	2,340	2,340	0.09	0.02	—	2,348
Dust From Material Movement	—	—	—	—	—	—	0.94	0.94	—	0.37	0.37	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.14	0.13	0.07	2.46	0.00	0.00	817	817	0.00	81.6	81.6	—	748	748	< 0.005	< 0.005	0.45	750
Vendor	0.01	0.01	0.26	0.11	< 0.005	0.01	90.1	90.1	0.01	9.01	9.01	—	257	257	< 0.005	0.04	0.03	268
Hauling	0.05	0.03	1.41	0.37	0.01	0.03	354	354	0.03	35.3	35.4	—	1,238	1,238	0.01	0.20	0.63	1,298
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.09	0.10	1.37	0.00	0.00	817	817	0.00	81.6	81.6	—	635	635	0.01	< 0.005	0.01	636
Vendor	0.01	0.01	0.29	0.12	< 0.005	0.01	90.1	90.1	0.01	9.01	9.01	—	257	257	< 0.005	0.04	< 0.005	269
Hauling	0.05	0.03	1.56	0.38	0.01	0.03	354	354	0.03	35.3	35.4	—	1,239	1,239	0.01	0.20	0.02	1,298
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.07	0.07	1.25	0.00	0.00	576	576	0.00	57.5	57.5	—	487	487	< 0.005	< 0.005	0.14	488
Vendor	0.01	0.01	0.20	0.08	< 0.005	< 0.005	63.5	63.5	< 0.005	6.35	6.35	—	184	184	< 0.005	0.03	0.01	192
Hauling	0.03	0.02	1.09	0.27	0.01	0.02	249	249	0.02	24.9	24.9	—	885	885	0.01	0.14	0.19	927
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.01	0.23	0.00	0.00	105	105	0.00	10.5	10.5	—	80.6	80.6	< 0.005	< 0.005	0.02	80.7
Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	30.4	30.4	< 0.005	< 0.005	< 0.005	31.7
Hauling	0.01	< 0.005	0.20	0.05	< 0.005	< 0.005	45.5	45.5	< 0.005	4.55	4.55	—	146	146	< 0.005	0.02	0.03	153

3.25. Grading (2042) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	1.92	1.92	13.3	106	0.18	0.37	—	0.37	0.37	—	0.37	—	19,788	19,788	0.80	0.16	—	19,856
Dust From Material Movement	—	—	—	—	—	—	7.18	7.18	—	2.85	2.85	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.92	1.92	13.3	106	0.18	0.37	—	0.37	0.37	—	0.37	—	19,788	19,788	0.80	0.16	—	19,856
Dust From Material Movement	—	—	—	—	—	—	7.18	7.18	—	2.85	2.85	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.37	1.37	9.48	75.7	0.13	0.27	—	0.27	0.27	—	0.27	—	14,135	14,135	0.57	0.11	—	14,183
Dust From Material Movement	—	—	—	—	—	—	5.13	5.13	—	2.04	2.04	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.25	0.25	1.73	13.8	0.02	0.05	—	0.05	0.05	—	0.05	—	2,340	2,340	0.09	0.02	—	2,348

Dust From Material Movement	—	—	—	—	—	—	0.94	0.94	—	0.37	0.37	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.13	0.10	0.07	2.38	0.00	0.00	817	817	0.00	81.6	81.6	—	744	744	< 0.005	< 0.005	0.38	745
Vendor	0.01	0.01	0.26	0.11	< 0.005	0.01	90.1	90.1	0.01	9.01	9.01	—	254	254	< 0.005	0.04	0.02	265
Hauling	0.05	0.03	1.41	0.37	0.01	0.03	354	354	0.03	35.3	35.4	—	1,233	1,233	< 0.005	0.20	0.55	1,292
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.09	0.10	1.33	0.00	0.00	817	817	0.00	81.6	81.6	—	631	631	0.01	< 0.005	0.01	633
Vendor	0.01	0.01	0.29	0.12	< 0.005	0.01	90.1	90.1	0.01	9.01	9.01	—	254	254	< 0.005	0.04	< 0.005	265
Hauling	0.05	0.03	1.55	0.38	0.01	0.03	354	354	0.03	35.3	35.4	—	1,234	1,234	< 0.005	0.20	0.01	1,293
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.07	0.05	1.21	0.00	0.00	576	576	0.00	57.5	57.5	—	484	484	< 0.005	< 0.005	0.12	485
Vendor	0.01	0.01	0.20	0.08	< 0.005	< 0.005	63.5	63.5	< 0.005	6.35	6.35	—	181	181	< 0.005	0.03	0.01	189
Hauling	0.03	0.02	1.08	0.27	0.01	0.02	249	249	0.02	24.9	24.9	—	881	881	< 0.005	0.14	0.17	923
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.01	0.22	0.00	0.00	105	105	0.00	10.5	10.5	—	80.1	80.1	< 0.005	< 0.005	0.02	80.3
Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	30.0	30.0	< 0.005	< 0.005	< 0.005	31.3
Hauling	0.01	< 0.005	0.20	0.05	< 0.005	< 0.005	45.5	45.5	< 0.005	4.55	4.55	—	146	146	< 0.005	0.02	0.03	153

3.27. Grading (2043) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.92	1.92	13.3	106	0.18	0.37	—	0.37	0.37	—	0.37	—	19,788	19,788	0.80	0.16	—	19,856
Dust From Material Movement	—	—	—	—	—	—	7.18	7.18	—	2.85	2.85	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.92	1.92	13.3	106	0.18	0.37	—	0.37	0.37	—	0.37	—	19,788	19,788	0.80	0.16	—	19,856
Dust From Material Movement	—	—	—	—	—	—	7.18	7.18	—	2.85	2.85	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.37	1.37	9.48	75.7	0.13	0.27	—	0.27	0.27	—	0.27	—	14,134	14,134	0.57	0.11	—	14,183
Dust From Material Movement	—	—	—	—	—	—	5.13	5.13	—	2.04	2.04	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.25	0.25	1.73	13.8	0.02	0.05	—	0.05	0.05	—	0.05	—	2,340	2,340	0.09	0.02	—	2,348
Dust From Material Movement	—	—	—	—	—	—	0.94	0.94	—	0.37	0.37	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.13	0.10	0.07	2.33	0.00	0.00	817	817	0.00	81.6	81.6	—	740	740	< 0.005	< 0.005	0.32	741
Vendor	0.01	0.01	0.26	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	251	251	< 0.005	0.04	0.02	262
Hauling	0.05	0.03	1.40	0.37	0.01	0.03	354	354	0.03	35.3	35.4	—	1,229	1,229	< 0.005	0.20	0.48	1,288
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.09	0.07	1.30	0.00	0.00	817	817	0.00	81.6	81.6	—	628	628	0.01	< 0.005	0.01	629
Vendor	0.01	0.01	0.28	0.12	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	251	251	< 0.005	0.04	< 0.005	262
Hauling	0.05	0.03	1.55	0.39	0.01	0.03	354	354	0.03	35.3	35.4	—	1,230	1,230	< 0.005	0.20	0.01	1,289
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.06	0.05	1.18	0.00	0.00	576	576	0.00	57.5	57.5	—	481	481	< 0.005	< 0.005	0.10	482
Vendor	0.01	0.01	0.20	0.08	< 0.005	< 0.005	63.5	63.5	< 0.005	6.35	6.35	—	179	179	< 0.005	0.03	< 0.005	187
Hauling	0.03	0.02	1.08	0.27	0.01	0.02	249	249	0.02	24.9	24.9	—	878	878	< 0.005	0.14	0.15	920
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.01	0.22	0.00	0.00	105	105	0.00	10.5	10.5	—	79.7	79.7	< 0.005	< 0.005	0.02	79.9

Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	29.7	29.7	< 0.005	< 0.005	< 0.005	31.0
Hauling	0.01	< 0.005	0.20	0.05	< 0.005	< 0.005	45.5	45.5	< 0.005	4.55	4.55	—	145	145	< 0.005	0.02	0.02	152

3.29. Grading (2044) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.92	1.92	13.3	106	0.18	0.37	—	0.37	0.37	—	0.37	—	19,788	19,788	0.80	0.16	—	19,856
Dust From Material Movement	—	—	—	—	—	—	7.18	7.18	—	2.85	2.85	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.92	1.92	13.3	106	0.18	0.37	—	0.37	0.37	—	0.37	—	19,788	19,788	0.80	0.16	—	19,856
Dust From Material Movement	—	—	—	—	—	—	7.18	7.18	—	2.85	2.85	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	1.37	1.37	9.51	76.0	0.13	0.27	—	0.27	0.27	—	0.27	—	14,173	14,173	0.57	0.11	—	14,222
Dust From Material Movement	—	—	—	—	—	—	5.14	5.14	—	2.04	2.04	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.25	0.25	1.74	13.9	0.02	0.05	—	0.05	0.05	—	0.05	—	2,347	2,347	0.10	0.02	—	2,355
Dust From Material Movement	—	—	—	—	—	—	0.94	0.94	—	0.37	0.37	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.10	0.07	2.28	0.00	0.00	817	817	0.00	81.6	81.6	—	737	737	< 0.005	< 0.005	0.28	738
Vendor	0.01	0.01	0.26	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	248	248	< 0.005	0.04	0.01	259
Hauling	0.05	0.03	1.40	0.38	0.01	0.03	354	354	0.03	35.3	35.4	—	1,226	1,226	< 0.005	0.20	0.41	1,285
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.09	0.07	1.27	0.00	0.00	817	817	0.00	81.6	81.6	—	626	626	0.01	< 0.005	0.01	627
Vendor	0.01	0.01	0.28	0.12	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	248	248	< 0.005	0.04	< 0.005	260
Hauling	0.05	0.03	1.54	0.39	0.01	0.03	354	354	0.03	35.3	35.4	—	1,227	1,227	< 0.005	0.20	0.01	1,286
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.06	0.05	1.17	0.00	0.00	578	578	0.00	57.7	57.7	—	481	481	< 0.005	< 0.005	0.08	482

Vendor	0.01	0.01	0.20	0.08	< 0.005	< 0.005	63.7	63.7	< 0.005	6.37	6.37	—	178	178	< 0.005	0.03	< 0.005	186
Hauling	0.03	0.02	1.08	0.27	0.01	0.02	250	250	0.02	25.0	25.0	—	878	878	< 0.005	0.14	0.13	921
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.21	0.00	0.00	105	105	0.00	10.5	10.5	—	79.6	79.6	< 0.005	< 0.005	0.01	79.8
Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	29.4	29.4	< 0.005	< 0.005	< 0.005	30.8
Hauling	0.01	< 0.005	0.20	0.05	< 0.005	< 0.005	45.6	45.6	< 0.005	4.56	4.56	—	145	145	< 0.005	0.02	0.02	152

3.31. Building Construction (2040) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.78	0.78	8.78	46.9	0.07	0.14	—	0.14	0.14	—	0.14	—	7,435	7,435	0.30	0.06	—	7,461
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.78	0.78	8.78	46.9	0.07	0.14	—	0.14	0.14	—	0.14	—	7,435	7,435	0.30	0.06	—	7,461
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.56	0.56	6.29	33.6	0.05	0.10	—	0.10	0.10	—	0.10	—	5,325	5,325	0.22	0.04	—	5,344
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.10	1.15	6.13	0.01	0.02	—	0.02	0.02	—	0.02	—	882	882	0.04	0.01	—	885
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	6.67	6.55	4.64	120	0.00	0.00	38,002	38,002	0.00	3,794	3,794	—	34,998	34,998	0.25	0.18	24.2	35,083
Vendor	1.11	0.96	24.7	10.3	0.25	0.50	8,337	8,338	0.50	833	834	—	24,140	24,140	0.10	3.44	3.93	25,172
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.87	4.61	4.64	66.2	0.00	0.00	38,002	38,002	0.00	3,794	3,794	—	29,704	29,704	0.25	0.18	0.63	29,765
Vendor	1.01	0.86	27.0	10.8	0.25	0.50	8,337	8,338	0.50	833	834	—	24,175	24,175	0.10	3.44	0.10	25,203
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.30	4.25	3.28	60.8	0.00	0.00	26,861	26,861	0.00	2,682	2,682	—	22,832	22,832	0.18	0.13	7.49	22,884
Vendor	0.76	0.63	18.9	7.52	0.18	0.36	5,893	5,893	0.36	589	589	—	17,301	17,301	0.07	2.46	1.22	18,038
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.78	0.78	0.60	11.1	0.00	0.00	4,902	4,902	0.00	489	489	—	3,780	3,780	0.03	0.02	1.24	3,789

Vendor	0.14	0.12	3.44	1.37	0.03	0.07	1,075	1,076	0.07	107	108	—	2,864	2,864	0.01	0.41	0.20	2,986
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.33. Building Construction (2041) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.78	0.78	8.78	46.9	0.07	0.14	—	0.14	0.14	—	0.14	—	7,435	7,435	0.30	0.06	—	7,461
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.78	0.78	8.78	46.9	0.07	0.14	—	0.14	0.14	—	0.14	—	7,435	7,435	0.30	0.06	—	7,461
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.56	0.56	6.27	33.5	0.05	0.10	—	0.10	0.10	—	0.10	—	5,311	5,311	0.22	0.04	—	5,329
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.10	0.10	1.15	6.12	0.01	0.02	—	0.02	0.02	—	0.02	—	879	879	0.04	0.01	—	882
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	6.30	6.24	3.44	115	0.00	0.00	38,002	38,002	0.00	3,794	3,794	—	34,778	34,778	0.18	0.18	20.8	34,859
Vendor	1.11	0.96	24.4	10.3	0.25	0.50	8,337	8,338	0.50	833	834	—	23,781	23,781	0.10	3.44	2.87	24,811
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.63	4.37	4.58	63.5	0.00	0.00	38,002	38,002	0.00	3,794	3,794	—	29,520	29,520	0.25	0.18	0.54	29,582
Vendor	1.01	0.86	26.7	10.7	0.25	0.50	8,337	8,338	0.50	833	834	—	23,816	23,816	0.10	3.44	0.07	24,844
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.15	3.30	3.23	58.0	0.00	0.00	26,788	26,788	0.00	2,675	2,675	—	22,629	22,629	0.18	0.13	6.40	22,679
Vendor	0.76	0.63	18.6	7.48	0.18	0.36	5,877	5,877	0.36	587	588	—	16,997	16,997	0.07	2.46	0.88	17,732
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.76	0.60	0.59	10.6	0.00	0.00	4,889	4,889	0.00	488	488	—	3,746	3,746	0.03	0.02	1.06	3,755
Vendor	0.14	0.12	3.39	1.36	0.03	0.07	1,073	1,073	0.07	107	107	—	2,814	2,814	0.01	0.41	0.15	2,936
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.35. Building Construction (2042) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.78	0.78	8.78	46.9	0.07	0.14	—	0.14	0.14	—	0.14	—	7,435	7,435	0.30	0.06	—	7,461
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.78	0.78	8.78	46.9	0.07	0.14	—	0.14	0.14	—	0.14	—	7,435	7,435	0.30	0.06	—	7,461
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.56	0.56	6.27	33.5	0.05	0.10	—	0.10	0.10	—	0.10	—	5,311	5,311	0.22	0.04	—	5,329
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.10	1.15	6.12	0.01	0.02	—	0.02	0.02	—	0.02	—	879	879	0.04	0.01	—	882
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	6.06	4.86	3.44	111	0.00	0.00	38,002	38,002	0.00	3,794	3,794	—	34,578	34,578	0.18	0.18	17.7	34,656
Vendor	1.11	0.96	24.1	10.3	0.25	0.50	8,337	8,338	0.50	833	834	—	23,464	23,464	0.10	3.44	2.06	24,494
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.51	4.24	4.58	61.9	0.00	0.00	38,002	38,002	0.00	3,794	3,794	—	29,356	29,356	0.25	0.18	0.46	29,417
Vendor	1.01	0.86	26.5	10.7	0.25	0.50	8,337	8,338	0.50	833	834	—	23,500	23,500	0.10	3.44	0.05	24,527
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.98	3.12	2.42	56.1	0.00	0.00	26,788	26,788	0.00	2,675	2,675	—	22,501	22,501	0.13	0.13	5.46	22,549
Vendor	0.76	0.63	18.5	7.46	0.18	0.36	5,877	5,877	0.36	587	588	—	16,771	16,771	0.07	2.46	0.63	17,505
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.73	0.57	0.44	10.2	0.00	0.00	4,889	4,889	0.00	488	488	—	3,725	3,725	0.02	0.02	0.90	3,733
Vendor	0.14	0.12	3.38	1.36	0.03	0.07	1,073	1,073	0.07	107	107	—	2,777	2,777	0.01	0.41	0.11	2,898
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.37. Building Construction (2043) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.78	0.78	8.78	46.9	0.07	0.14	—	0.14	0.14	—	0.14	—	7,435	7,435	0.30	0.06	—	7,461

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.78	0.78	8.78	46.9	0.07	0.14	—	0.14	0.14	—	0.14	—	7,435	7,435	0.30	0.06	—	7,461
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.56	0.56	6.27	33.5	0.05	0.10	—	0.10	0.10	—	0.10	—	5,311	5,311	0.22	0.04	—	5,329
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.10	1.15	6.12	0.01	0.02	—	0.02	0.02	—	0.02	—	879	879	0.04	0.01	—	882
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.87	4.67	3.38	108	0.00	0.00	38,002	38,002	0.00	3,794	3,794	—	34,402	34,402	0.18	0.18	15.0	34,476
Vendor	1.11	0.93	23.8	10.3	0.25	0.50	8,337	8,338	0.25	833	833	—	23,187	23,187	0.10	3.44	1.47	24,217
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	5.32	4.06	3.38	60.5	0.00	0.00	38,002	38,002	0.00	3,794	3,794	—	29,210	29,210	0.25	0.18	0.39	29,271
Vendor	1.01	0.86	26.2	10.7	0.25	0.50	8,337	8,338	0.25	833	833	—	23,223	23,223	0.10	3.44	0.04	24,251
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.84	2.99	2.37	55.1	0.00	0.00	26,788	26,788	0.00	2,675	2,675	—	22,387	22,387	0.13	0.13	4.64	22,435
Vendor	0.76	0.62	18.3	7.46	0.18	0.36	5,877	5,877	0.18	587	587	—	16,573	16,573	0.07	2.46	0.45	17,308
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.70	0.55	0.43	10.1	0.00	0.00	4,889	4,889	0.00	488	488	—	3,706	3,706	0.02	0.02	0.77	3,714
Vendor	0.14	0.11	3.35	1.36	0.03	0.07	1,073	1,073	0.03	107	107	—	2,744	2,744	0.01	0.41	0.08	2,866
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.39. Building Construction (2044) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.78	0.78	8.78	46.9	0.07	0.14	—	0.14	0.14	—	0.14	—	7,435	7,435	0.30	0.06	—	7,461
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.78	0.78	8.78	46.9	0.07	0.14	—	0.14	0.14	—	0.14	—	7,435	7,435	0.30	0.06	—	7,461
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.56	0.56	6.29	33.6	0.05	0.10	—	0.10	0.10	—	0.10	—	5,325	5,325	0.22	0.04	—	5,344
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.10	1.15	6.13	0.01	0.02	—	0.02	0.02	—	0.02	—	882	882	0.04	0.01	—	885
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.69	4.49	3.38	106	0.00	0.00	38,002	38,002	0.00	3,794	3,794	—	34,255	34,255	0.18	0.18	12.8	34,327
Vendor	1.11	0.93	23.8	10.2	0.25	0.50	8,337	8,338	0.25	833	833	—	22,947	22,947	0.10	3.44	1.04	23,976
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.06	4.00	3.38	59.1	0.00	0.00	38,002	38,002	0.00	3,794	3,794	—	29,087	29,087	0.25	0.18	0.33	29,148
Vendor	1.01	0.84	26.1	10.7	0.25	0.50	8,337	8,338	0.25	833	833	—	22,983	22,983	0.10	3.44	0.03	24,011
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.77	2.91	2.38	54.2	0.00	0.00	26,861	26,861	0.00	2,682	2,682	—	22,354	22,354	0.13	0.13	3.95	22,401
Vendor	0.76	0.63	18.2	7.46	0.18	0.36	5,893	5,893	0.18	589	589	—	16,446	16,446	0.07	2.46	0.32	17,183
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.69	0.53	0.43	9.90	0.00	0.00	4,902	4,902	0.00	489	489	—	3,701	3,701	0.02	0.02	0.65	3,709
Vendor	0.14	0.12	3.32	1.36	0.03	0.07	1,075	1,076	0.03	107	107	—	2,723	2,723	0.01	0.41	0.05	2,845
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.41. Paving (2040) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.48	0.48	5.80	31.8	0.04	0.08	—	0.08	0.08	—	0.08	—	4,532	4,532	0.18	0.04	—	4,547
Paving	12.1	12.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.48	0.48	5.80	31.8	0.04	0.08	—	0.08	0.08	—	0.08	—	4,532	4,532	0.18	0.04	—	4,547
Paving	12.1	12.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.34	0.34	4.15	22.8	0.03	0.06	—	0.06	0.06	—	0.06	—	3,246	3,246	0.13	0.03	—	3,257
Paving	8.64	8.64	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	0.76	4.16	0.01	0.01	—	0.01	0.01	—	0.01	—	537	537	0.02	< 0.005	—	539
Paving	1.58	1.58	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.11	0.08	1.97	0.00	0.00	627	627	0.00	62.6	62.6	—	577	577	< 0.005	< 0.005	0.40	578
Vendor	0.01	0.01	0.27	0.11	< 0.005	0.01	90.1	90.1	0.01	9.01	9.01	—	261	261	< 0.005	0.04	0.04	272
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.08	0.08	1.09	0.00	0.00	627	627	0.00	62.6	62.6	—	490	490	< 0.005	< 0.005	0.01	491
Vendor	0.01	0.01	0.29	0.12	< 0.005	0.01	90.1	90.1	0.01	9.01	9.01	—	261	261	< 0.005	0.04	< 0.005	272
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.07	0.07	0.05	1.00	0.00	0.00	443	443	0.00	44.2	44.2	—	376	376	< 0.005	< 0.005	0.12	377
Vendor	0.01	0.01	0.20	0.08	< 0.005	< 0.005	63.7	63.7	< 0.005	6.37	6.37	—	187	187	< 0.005	0.03	0.01	195
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.18	0.00	0.00	80.8	80.8	0.00	8.07	8.07	—	62.3	62.3	< 0.005	< 0.005	0.02	62.5
Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	31.0	31.0	< 0.005	< 0.005	< 0.005	32.3
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.43. Paving (2041) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.48	0.48	5.80	31.8	0.04	0.08	—	0.08	0.08	—	0.08	—	4,532	4,532	0.18	0.04	—	4,547
Paving	12.1	12.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.48	0.48	5.80	31.8	0.04	0.08	—	0.08	0.08	—	0.08	—	4,532	4,532	0.18	0.04	—	4,547
Paving	12.1	12.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.34	0.34	4.14	22.7	0.03	0.06	—	0.06	0.06	—	0.06	—	3,237	3,237	0.13	0.03	—	3,248
Paving	8.62	8.62	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	0.76	4.15	0.01	0.01	—	0.01	0.01	—	0.01	—	536	536	0.02	< 0.005	—	538
Paving	1.57	1.57	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.10	0.06	1.89	0.00	0.00	627	627	0.00	62.6	62.6	—	573	573	< 0.005	< 0.005	0.34	575
Vendor	0.01	0.01	0.26	0.11	< 0.005	0.01	90.1	90.1	0.01	9.01	9.01	—	257	257	< 0.005	0.04	0.03	268
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.07	0.08	1.05	0.00	0.00	627	627	0.00	62.6	62.6	—	487	487	< 0.005	< 0.005	0.01	488
Vendor	0.01	0.01	0.29	0.12	< 0.005	0.01	90.1	90.1	0.01	9.01	9.01	—	257	257	< 0.005	0.04	< 0.005	269
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.05	0.05	0.96	0.00	0.00	442	442	0.00	44.1	44.1	—	373	373	< 0.005	< 0.005	0.11	374
Vendor	0.01	0.01	0.20	0.08	< 0.005	< 0.005	63.5	63.5	< 0.005	6.35	6.35	—	184	184	< 0.005	0.03	0.01	192

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.17	0.00	0.00	80.6	80.6	0.00	8.05	8.05	—	61.8	61.8	< 0.005	< 0.005	0.02	61.9
Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	30.4	30.4	< 0.005	< 0.005	< 0.005	31.7
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.45. Paving (2042) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.48	0.48	5.80	31.8	0.04	0.08	—	0.08	0.08	—	0.08	—	4,532	4,532	0.18	0.04	—	4,547
Paving	12.1	12.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.48	0.48	5.80	31.8	0.04	0.08	—	0.08	0.08	—	0.08	—	4,532	4,532	0.18	0.04	—	4,547
Paving	12.1	12.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.34	0.34	4.14	22.7	0.03	0.06	—	0.06	0.06	—	0.06	—	3,237	3,237	0.13	0.03	—	3,248
Paving	8.62	8.62	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	0.76	4.15	0.01	0.01	—	0.01	0.01	—	0.01	—	536	536	0.02	< 0.005	—	538
Paving	1.57	1.57	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.08	0.06	1.83	0.00	0.00	627	627	0.00	62.6	62.6	—	570	570	< 0.005	< 0.005	0.29	571
Vendor	0.01	0.01	0.26	0.11	< 0.005	0.01	90.1	90.1	0.01	9.01	9.01	—	254	254	< 0.005	0.04	0.02	265
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.07	0.08	1.02	0.00	0.00	627	627	0.00	62.6	62.6	—	484	484	< 0.005	< 0.005	0.01	485
Vendor	0.01	0.01	0.29	0.12	< 0.005	0.01	90.1	90.1	0.01	9.01	9.01	—	254	254	< 0.005	0.04	< 0.005	265
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.05	0.04	0.92	0.00	0.00	442	442	0.00	44.1	44.1	—	371	371	< 0.005	< 0.005	0.09	372
Vendor	0.01	0.01	0.20	0.08	< 0.005	< 0.005	63.5	63.5	< 0.005	6.35	6.35	—	181	181	< 0.005	0.03	0.01	189
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.01	0.01	0.01	0.17	0.00	0.00	80.6	80.6	0.00	8.05	8.05	—	61.4	61.4	< 0.005	< 0.005	0.01	61.6
Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	30.0	30.0	< 0.005	< 0.005	< 0.005	31.3
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.47. Paving (2043) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.48	0.48	5.80	31.8	0.04	0.08	—	0.08	0.08	—	0.08	—	4,532	4,532	0.18	0.04	—	4,547
Paving	12.1	12.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.48	0.48	5.80	31.8	0.04	0.08	—	0.08	0.08	—	0.08	—	4,532	4,532	0.18	0.04	—	4,547
Paving	12.1	12.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.34	0.34	4.14	22.7	0.03	0.06	—	0.06	0.06	—	0.06	—	3,237	3,237	0.13	0.03	—	3,248

Paving	8.62	8.62	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	0.76	4.15	0.01	0.01	—	0.01	0.01	—	0.01	—	536	536	0.02	< 0.005	—	538
Paving	1.57	1.57	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.08	0.06	1.78	0.00	0.00	627	627	0.00	62.6	62.6	—	567	567	< 0.005	< 0.005	0.25	568
Vendor	0.01	0.01	0.26	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	251	251	< 0.005	0.04	0.02	262
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.07	0.06	1.00	0.00	0.00	627	627	0.00	62.6	62.6	—	482	482	< 0.005	< 0.005	0.01	483
Vendor	0.01	0.01	0.28	0.12	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	251	251	< 0.005	0.04	< 0.005	262
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.04	0.91	0.00	0.00	442	442	0.00	44.1	44.1	—	369	369	< 0.005	< 0.005	0.08	370
Vendor	0.01	0.01	0.20	0.08	< 0.005	< 0.005	63.5	63.5	< 0.005	6.35	6.35	—	179	179	< 0.005	0.03	< 0.005	187
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.17	0.00	0.00	80.6	80.6	0.00	8.05	8.05	—	61.1	61.1	< 0.005	< 0.005	0.01	61.2
Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	29.7	29.7	< 0.005	< 0.005	< 0.005	31.0

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.49. Paving (2044) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.48	0.48	5.80	31.8	0.04	0.08	—	0.08	0.08	—	0.08	—	4,532	4,532	0.18	0.04	—	4,547
Paving	12.1	12.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.48	0.48	5.80	31.8	0.04	0.08	—	0.08	0.08	—	0.08	—	4,532	4,532	0.18	0.04	—	4,547
Paving	12.1	12.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.34	0.34	4.15	22.8	0.03	0.06	—	0.06	0.06	—	0.06	—	3,246	3,246	0.13	0.03	—	3,257
Paving	8.64	8.64	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	0.76	4.16	0.01	0.01	—	0.01	0.01	—	0.01	—	537	537	0.02	< 0.005	—	539
Paving	1.58	1.58	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.07	0.06	1.74	0.00	0.00	627	627	0.00	62.6	62.6	—	565	565	< 0.005	< 0.005	0.21	566
Vendor	0.01	0.01	0.26	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	248	248	< 0.005	0.04	0.01	259
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.06	0.97	0.00	0.00	627	627	0.00	62.6	62.6	—	480	480	< 0.005	< 0.005	0.01	481
Vendor	0.01	0.01	0.28	0.12	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	248	248	< 0.005	0.04	< 0.005	260
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.04	0.89	0.00	0.00	443	443	0.00	44.2	44.2	—	369	369	< 0.005	< 0.005	0.07	369
Vendor	0.01	0.01	0.20	0.08	< 0.005	< 0.005	63.7	63.7	< 0.005	6.37	6.37	—	178	178	< 0.005	0.03	< 0.005	186
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.16	0.00	0.00	80.8	80.8	0.00	8.07	8.07	—	61.0	61.0	< 0.005	< 0.005	0.01	61.1
Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	29.4	29.4	< 0.005	< 0.005	< 0.005	30.8
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.51. Architectural Coating (2040) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	1.94	2.89	0.01	0.01	—	0.01	0.01	—	0.01	—	401	401	0.02	< 0.005	—	402
Architectural Coatings	72.1	72.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	1.94	2.89	0.01	0.01	—	0.01	0.01	—	0.01	—	401	401	0.02	< 0.005	—	402
Architectural Coatings	72.1	72.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.05	1.39	2.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	287	287	0.01	< 0.005	—	288

Architect Coatings	51.7	51.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.25	0.38	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	47.5	47.5	< 0.005	< 0.005	—	47.7
Architectural Coatings	9.43	9.43	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.33	1.31	0.93	23.9	0.00	0.00	7,595	7,595	0.00	758	758	—	6,995	6,995	0.05	0.04	4.85	7,012
Vendor	0.01	0.01	0.27	0.11	< 0.005	0.01	90.1	90.1	0.01	9.01	9.01	—	261	261	< 0.005	0.04	0.04	272
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.17	0.92	0.93	13.2	0.00	0.00	7,595	7,595	0.00	758	758	—	5,937	5,937	0.05	0.04	0.13	5,949
Vendor	0.01	0.01	0.29	0.12	< 0.005	0.01	90.1	90.1	0.01	9.01	9.01	—	261	261	< 0.005	0.04	< 0.005	272
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.86	0.85	0.66	12.2	0.00	0.00	5,369	5,369	0.00	536	536	—	4,563	4,563	0.04	0.03	1.50	4,574
Vendor	0.01	0.01	0.20	0.08	< 0.005	< 0.005	63.7	63.7	< 0.005	6.37	6.37	—	187	187	< 0.005	0.03	0.01	195
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.16	0.16	0.12	2.22	0.00	0.00	980	980	0.00	97.8	97.8	—	756	756	0.01	< 0.005	0.25	757
Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	31.0	31.0	< 0.005	< 0.005	< 0.005	32.3
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.53. Architectural Coating (2041) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	1.94	2.89	0.01	0.01	—	0.01	0.01	—	0.01	—	401	401	0.02	< 0.005	—	402
Architectural Coatings	72.1	72.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	1.94	2.89	0.01	0.01	—	0.01	0.01	—	0.01	—	401	401	0.02	< 0.005	—	402
Architectural Coatings	72.1	72.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.05	1.38	2.06	< 0.005	0.01	—	0.01	0.01	—	0.01	—	286	286	0.01	< 0.005	—	287
Architectural Coatings	51.5	51.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.25	0.38	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	47.4	47.4	< 0.005	< 0.005	—	47.5
Architectural Coatings	9.40	9.40	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.26	1.25	0.69	22.9	0.00	0.00	7,595	7,595	0.00	758	758	—	6,951	6,951	0.04	0.04	4.16	6,967
Vendor	0.01	0.01	0.26	0.11	< 0.005	0.01	90.1	90.1	0.01	9.01	9.01	—	257	257	< 0.005	0.04	0.03	268
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.12	0.87	0.92	12.7	0.00	0.00	7,595	7,595	0.00	758	758	—	5,900	5,900	0.05	0.04	0.11	5,912
Vendor	0.01	0.01	0.29	0.12	< 0.005	0.01	90.1	90.1	0.01	9.01	9.01	—	257	257	< 0.005	0.04	< 0.005	269

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.83	0.66	0.65	11.6	0.00	0.00	5,354	5,354	0.00	535	535	—	4,523	4,523	0.04	0.03	1.28	4,533
Vendor	0.01	0.01	0.20	0.08	< 0.005	< 0.005	63.5	63.5	< 0.005	6.35	6.35	—	184	184	< 0.005	0.03	0.01	192
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.15	0.12	0.12	2.11	0.00	0.00	977	977	0.00	97.6	97.6	—	749	749	0.01	< 0.005	0.21	750
Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	30.4	30.4	< 0.005	< 0.005	< 0.005	31.7
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.55. Architectural Coating (2042) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	1.94	2.89	0.01	0.01	—	0.01	0.01	—	0.01	—	401	401	0.02	< 0.005	—	402
Architectural Coatings	72.1	72.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.06	0.06	1.94	2.89	0.01	0.01	—	0.01	0.01	—	0.01	—	401	401	0.02	< 0.005	—	402
Architectural Coatings	72.1	72.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.05	1.38	2.06	< 0.005	0.01	—	0.01	0.01	—	0.01	—	286	286	0.01	< 0.005	—	287
Architectural Coatings	51.5	51.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.25	0.38	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	47.4	47.4	< 0.005	< 0.005	—	47.5
Architectural Coatings	9.40	9.40	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.21	0.97	0.69	22.2	0.00	0.00	7,595	7,595	0.00	758	758	—	6,911	6,911	0.04	0.04	3.54	6,926

Vendor	0.01	0.01	0.26	0.11	< 0.005	0.01	90.1	90.1	0.01	9.01	9.01	—	254	254	< 0.005	0.04	0.02	265
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.10	0.85	0.92	12.4	0.00	0.00	7,595	7,595	0.00	758	758	—	5,867	5,867	0.05	0.04	0.09	5,879
Vendor	0.01	0.01	0.29	0.12	< 0.005	0.01	90.1	90.1	0.01	9.01	9.01	—	254	254	< 0.005	0.04	< 0.005	265
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.79	0.62	0.48	11.2	0.00	0.00	5,354	5,354	0.00	535	535	—	4,497	4,497	0.03	0.03	1.09	4,507
Vendor	0.01	0.01	0.20	0.08	< 0.005	< 0.005	63.5	63.5	< 0.005	6.35	6.35	—	181	181	< 0.005	0.03	0.01	189
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.15	0.11	0.09	2.04	0.00	0.00	977	977	0.00	97.6	97.6	—	745	745	< 0.005	< 0.005	0.18	746
Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	30.0	30.0	< 0.005	< 0.005	< 0.005	31.3
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.57. Architectural Coating (2043) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	1.94	2.89	0.01	0.01	—	0.01	0.01	—	0.01	—	401	401	0.02	< 0.005	—	402

Architectural Coatings	72.1	72.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	1.94	2.89	0.01	0.01	—	0.01	0.01	—	0.01	—	401	401	0.02	< 0.005	—	402
Architectural Coatings	72.1	72.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.05	1.38	2.06	< 0.005	0.01	—	0.01	0.01	—	0.01	—	286	286	0.01	< 0.005	—	287
Architectural Coatings	51.5	51.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.25	0.38	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	47.4	47.4	< 0.005	< 0.005	—	47.5

Architectural Coating	9.40	9.40	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.17	0.93	0.68	21.6	0.00	0.00	7,595	7,595	0.00	758	758	—	6,876	6,876	0.04	0.04	3.01	6,891
Vendor	0.01	0.01	0.26	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	251	251	< 0.005	0.04	0.02	262
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.06	0.81	0.68	12.1	0.00	0.00	7,595	7,595	0.00	758	758	—	5,838	5,838	0.05	0.04	0.08	5,850
Vendor	0.01	0.01	0.28	0.12	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	251	251	< 0.005	0.04	< 0.005	262
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.77	0.60	0.47	11.0	0.00	0.00	5,354	5,354	0.00	535	535	—	4,474	4,474	0.03	0.03	0.93	4,484
Vendor	0.01	0.01	0.20	0.08	< 0.005	< 0.005	63.5	63.5	< 0.005	6.35	6.35	—	179	179	< 0.005	0.03	< 0.005	187
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.14	0.11	0.09	2.01	0.00	0.00	977	977	0.00	97.6	97.6	—	741	741	< 0.005	< 0.005	0.15	742
Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	29.7	29.7	< 0.005	< 0.005	< 0.005	31.0
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.59. Architectural Coating (2044) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	1.94	2.89	0.01	0.01	—	0.01	0.01	—	0.01	—	401	401	0.02	< 0.005	—	402
Architectural Coatings	72.1	72.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	1.94	2.89	0.01	0.01	—	0.01	0.01	—	0.01	—	401	401	0.02	< 0.005	—	402
Architectural Coatings	72.1	72.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.05	1.39	2.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	287	287	0.01	< 0.005	—	288
Architectural Coatings	51.7	51.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.25	0.38	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	47.5	47.5	< 0.005	< 0.005	—	47.7
Architectural Coatings	9.43	9.43	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.14	0.90	0.68	21.1	0.00	0.00	7,595	7,595	0.00	758	758	—	6,846	6,846	0.04	0.04	2.56	6,861
Vendor	0.01	0.01	0.26	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	248	248	< 0.005	0.04	0.01	259
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.81	0.80	0.68	11.8	0.00	0.00	7,595	7,595	0.00	758	758	—	5,813	5,813	0.05	0.04	0.07	5,826
Vendor	0.01	0.01	0.28	0.12	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	248	248	< 0.005	0.04	< 0.005	260
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.75	0.58	0.48	10.8	0.00	0.00	5,369	5,369	0.00	536	536	—	4,468	4,468	0.03	0.03	0.79	4,477
Vendor	0.01	0.01	0.20	0.08	< 0.005	< 0.005	63.7	63.7	< 0.005	6.37	6.37	—	178	178	< 0.005	0.03	< 0.005	186
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.14	0.11	0.09	1.98	0.00	0.00	980	980	0.00	97.8	97.8	—	740	740	< 0.005	< 0.005	0.13	741

Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	29.4	29.4	< 0.005	< 0.005	< 0.005	30.8
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	1/1/2040	12/31/2044	5.00	1,305	—
Site Preparation	Site Preparation	1/1/2040	12/31/2044	5.00	1,305	—
Grading	Grading	1/1/2040	12/31/2044	5.00	1,305	—
Building Construction	Building Construction	1/1/2040	12/31/2044	5.00	1,305	—
Paving	Paving	1/1/2040	12/31/2044	5.00	1,305	—
Architectural Coating	Architectural Coating	1/1/2040	12/31/2044	5.00	1,305	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

Demolition	Rubber Tired Dozers	Diesel	Tier 4 Final	6.00	8.00	367	0.40
Demolition	Excavators	Diesel	Tier 4 Final	9.00	8.00	36.0	0.38
Demolition	Concrete/Industrial Saws	Diesel	Tier 4 Final	3.00	8.00	33.0	0.73
Site Preparation	Rubber Tired Dozers	Diesel	Tier 4 Final	9.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	12.0	8.00	84.0	0.37
Grading	Graders	Diesel	Tier 4 Final	3.00	8.00	148	0.41
Grading	Excavators	Diesel	Tier 4 Final	6.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	6.00	8.00	84.0	0.37
Grading	Scrapers	Diesel	Tier 4 Final	6.00	8.00	423	0.48
Grading	Rubber Tired Dozers	Diesel	Tier 4 Final	3.00	8.00	367	0.40
Building Construction	Forklifts	Diesel	Tier 4 Final	9.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Tier 4 Final	3.00	8.00	25.0	0.74
Building Construction	Cranes	Diesel	Tier 4 Final	3.00	7.00	367	0.29
Building Construction	Welders	Diesel	Tier 4 Final	3.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	9.00	7.00	84.0	0.37
Paving	Pavers	Diesel	Tier 4 Final	6.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Tier 4 Final	6.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Tier 4 Final	6.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Tier 4 Final	3.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	46.0	18.5	LDA,LDT1,LDT2

Demolition	Vendor	12.0	10.2	HHDT,MHDT
Demolition	Hauling	2.00	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	54.0	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	12.0	10.2	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	60.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	12.0	10.2	HHDT,MHDT
Grading	Hauling	24.0	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	2,790	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	1,110	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	46.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	12.0	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	558	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	12.0	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Control Strategies Applied	PM10 Reduction	PM2.5 Reduction
Water unpaved roads twice daily	74%	74%
Limit vehicle speeds on unpaved roads to 25 mph	44%	44%
Sweep paved roads once per month	9%	9%

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00	0.00	10,150,824	3,383,608	—

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (Building Square Footage)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	50,000	—
Site Preparation	—	—	5,873	0.00	—
Grading	125,000	125,000	11,745	0.00	—
Paving	0.00	0.00	0.00	0.00	6,009

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	3	74%	74%
Water Demolished Area	2	36%	36%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
General Office Building	361	100%
General Heavy Industry	1,925	100%
General Heavy Industry	1,196	100%
Manufacturing	603	100%
Manufacturing	1,922	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2040	0.00	457	0.03	< 0.005
2041	0.00	457	0.03	< 0.005
2042	0.00	457	0.03	< 0.005
2043	0.00	457	0.03	< 0.005
2044	0.00	457	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	32.8	annual days of extreme heat
Extreme Precipitation	0.00	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.19	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A

Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	11.6
AQ-PM	19.1
AQ-DPM	9.09
Drinking Water	30.6
Lead Risk Housing	50.8
Pesticides	90.5
Toxic Releases	7.58
Traffic	3.06
Effect Indicators	—
CleanUp Sites	74.2
Groundwater	77.9
Haz Waste Facilities/Generators	93.2
Impaired Water Bodies	100.0
Solid Waste	86.5
Sensitive Population	—
Asthma	87.6
Cardio-vascular	83.2
Low Birth Weights	26.9
Socioeconomic Factor Indicators	—
Education	82.7
Housing	51.4
Linguistic	88.8

Poverty	94.9
Unemployment	99.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	16.66880534
Employed	7.173104068
Median HI	5.299627871
Education	—
Bachelor's or higher	5.017323239
High school enrollment	16.8741178
Preschool enrollment	68.89516233
Transportation	—
Auto Access	18.40112922
Active commuting	51.10997049
Social	—
2-parent households	13.28114975
Voting	16.79712563
Neighborhood	—
Alcohol availability	70.25535737
Park access	33.85089183
Retail density	4.311561658
Supermarket access	49.58295907
Tree canopy	0.782753753
Housing	—
Homeownership	38.3036058

Housing habitability	30.96368536
Low-inc homeowner severe housing cost burden	26.76761196
Low-inc renter severe housing cost burden	52.89362248
Uncrowded housing	38.58591043
Health Outcomes	—
Insured adults	21.00603105
Arthritis	0.0
Asthma ER Admissions	30.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	41.7
Cognitively Disabled	50.3
Physically Disabled	19.5
Heart Attack ER Admissions	46.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	54.3
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0

Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	14.1
Elderly	42.0
English Speaking	18.7
Foreign-born	65.3
Outdoor Workers	5.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	85.8
Traffic Density	4.9
Traffic Access	23.0
Other Indices	—
Hardship	92.9
Other Decision Support	—
2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	82.0
Healthy Places Index Score for Project Location (b)	11.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Construction: Construction Phases	Land use data are based applicant-provided buildout assumptions. Phase 2 (2040-2044) represents 50% of 10-year buildout.
Construction: Off-Road Equipment	Equipment increased based on scaler per buildout methodology.
Construction: Trips and VMT	Trips increased based on scaler per buildout methodology.
Construction: On-Road Fugitive Dust	All roads used by future developments projects within the Specific Plan Area would be required to be paved. Per ICAPCD guidance a value of 85% paved is assumed in the modeling to account for the high levels of entrained dust generated from vehicle travel on paved roadways in the region. PM reductions altered based on dust control plan implementation strategies (watering unpaved roads three times per day).
Construction: Paving	Paved area acreages calculated based on buildout estimates. Conservatively assumed 100% asphalt.

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3.45. Paving (2047) - Unmitigated

3.47. Paving (2048) - Unmitigated

3.49. Paving (2049) - Unmitigated

3.51. Architectural Coating (2045) - Unmitigated

3.53. Architectural Coating (2046) - Unmitigated

3.55. Architectural Coating (2047) - Unmitigated

3.57. Architectural Coating (2048) - Unmitigated

3.59. Architectural Coating (2049) - Unmitigated

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

5. Activity Data

5.1. Construction Schedule

5.2. Off-Road Equipment

5.2.1. Unmitigated

5.3. Construction Vehicles

5.3.1. Unmitigated

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

5.5. Architectural Coatings

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

5.6.2. Construction Earthmoving Control Strategies

5.7. Construction Paving

5.8. Construction Electricity Consumption and Emissions Factors

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

5.18.2. Sequestration

5.18.2.1. Unmitigated

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

6.2. Initial Climate Risk Scores

6.3. Adjusted Climate Risk Scores

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

7.2. Healthy Places Index Scores

7.3. Overall Health & Equity Scores

7.4. Health & Equity Measures

7.5. Evaluation Scorecard

7.6. Health & Equity Custom Measures

8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Lithium Valley SP Construction - Phase 3 (2045-2049)
Construction Start Date	1/1/2045
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	4.80
Location	33.18829759139308, -115.6026869228474
County	Imperial
City	Unincorporated
Air District	Imperial County APCD
Air Basin	Salton Sea
TAZ	5600
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
General Heavy Industry	2,436	1000sqft	55.9	2,436,265	243,627	—	—	—
Manufacturing	1,420	1000sqft	32.6	1,420,275	142,027	—	—	—

Manufacturing	413	1000sqft	9.49	413,302	41,330	—	—	—
General Heavy Industry	110	1000sqft	2.52	109,825	10,977	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	70.7	69.6	72.2	425	0.73	1.48	39,227	39,228	1.30	3,926	3,927	—	105,220	105,220	2.60	3.26	10.3	106,268
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	69.3	69.1	73.8	385	0.73	1.48	39,227	39,228	1.30	3,926	3,927	—	100,783	100,783	2.65	3.26	0.27	101,823
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	49.6	49.4	52.4	285	0.53	1.06	27,727	27,728	0.93	2,775	2,776	—	73,286	73,286	1.86	2.33	3.17	74,031
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	9.05	9.02	9.57	52.0	0.10	0.19	5,060	5,060	0.17	506	507	—	12,133	12,133	0.31	0.39	0.52	12,257

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2045	70.7	69.6	72.2	425	0.73	1.48	39,227	39,228	1.30	3,926	3,927	—	105,220	105,220	2.60	3.26	10.3	106,268
2046	70.7	69.5	72.0	425	0.73	1.48	39,227	39,228	1.30	3,926	3,927	—	104,997	104,997	2.60	3.26	8.66	106,044
2047	70.6	69.5	71.9	424	0.73	1.48	39,227	39,228	1.30	3,926	3,927	—	104,803	104,803	2.60	3.09	7.29	105,795
2048	69.6	69.5	71.9	424	0.73	1.48	39,227	39,228	1.30	3,926	3,927	—	104,640	104,640	2.60	3.09	6.22	105,632
2049	69.5	69.4	71.9	423	0.73	1.48	39,227	39,228	1.30	3,926	3,927	—	104,510	104,510	2.60	3.09	5.32	105,501
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2045	69.3	69.1	73.8	385	0.73	1.48	39,227	39,228	1.30	3,926	3,927	—	100,783	100,783	2.65	3.26	0.27	101,823
2046	69.1	69.0	73.8	385	0.73	1.48	39,227	39,228	1.30	3,926	3,927	—	100,577	100,577	2.65	3.26	0.22	101,616
2047	69.1	69.0	73.8	385	0.73	1.48	39,227	39,228	1.30	3,926	3,927	—	100,396	100,396	2.65	3.09	0.19	101,383
2048	69.1	68.9	73.6	384	0.73	1.48	39,227	39,228	1.30	3,926	3,927	—	100,246	100,246	2.60	3.09	0.16	101,231
2049	69.0	68.9	73.6	384	0.73	1.48	39,227	39,228	1.30	3,926	3,927	—	100,122	100,122	2.58	3.09	0.14	101,107
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2045	49.6	49.4	52.4	285	0.52	1.05	27,651	27,652	0.93	2,767	2,768	—	73,286	73,286	1.85	2.33	3.17	74,031
2046	49.5	49.4	52.3	284	0.52	1.05	27,651	27,652	0.93	2,767	2,768	—	73,135	73,135	1.85	2.33	2.68	73,879
2047	49.5	49.4	52.2	284	0.52	1.05	27,651	27,652	0.93	2,767	2,768	—	73,001	73,001	1.85	2.21	2.25	73,708
2048	49.5	49.4	52.4	285	0.53	1.06	27,727	27,728	0.93	2,775	2,776	—	73,090	73,090	1.86	2.21	1.92	73,798
2049	49.4	49.3	52.2	284	0.52	1.05	27,651	27,652	0.93	2,767	2,768	—	72,800	72,800	1.85	2.21	1.65	73,506
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2045	9.05	9.02	9.57	52.0	0.10	0.19	5,046	5,046	0.17	505	505	—	12,133	12,133	0.31	0.39	0.52	12,257
2046	9.04	9.02	9.54	51.9	0.10	0.19	5,046	5,046	0.17	505	505	—	12,108	12,108	0.31	0.39	0.44	12,231
2047	9.03	9.01	9.54	51.9	0.10	0.19	5,046	5,046	0.17	505	505	—	12,086	12,086	0.31	0.37	0.37	12,203
2048	9.04	9.01	9.56	52.0	0.10	0.19	5,060	5,060	0.17	506	507	—	12,101	12,101	0.31	0.37	0.32	12,218
2049	9.01	8.99	9.53	51.9	0.10	0.19	5,046	5,046	0.17	505	505	—	12,053	12,053	0.31	0.37	0.27	12,170

3. Construction Emissions Details

3.1. Demolition (2045) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.09	1.09	13.5	54.5	0.10	0.19	—	0.19	0.19	—	0.19	—	10,278	10,278	0.42	0.08	—	10,313
Demolition	—	—	—	—	—	—	0.03	0.03	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.09	1.09	13.5	54.5	0.10	0.19	—	0.19	0.19	—	0.19	—	10,278	10,278	0.42	0.08	—	10,313
Demolition	—	—	—	—	—	—	0.03	0.03	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.78	0.78	9.65	38.9	0.07	0.14	—	0.14	0.14	—	0.14	—	7,341	7,341	0.30	0.06	—	7,366

Demoliti	—	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.14	1.76	7.11	0.01	0.02	—	0.02	0.02	—	0.02	—	1,215	1,215	0.05	0.01	—	1,220
Demolition	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.07	0.06	1.72	0.00	0.00	627	627	0.00	62.6	62.6	—	563	563	< 0.005	< 0.005	0.18	564
Vendor	0.01	0.01	0.26	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	246	246	< 0.005	0.04	0.01	257
Hauling	< 0.005	< 0.005	0.12	0.03	< 0.005	< 0.005	29.5	29.5	< 0.005	2.94	2.95	—	102	102	< 0.005	0.02	0.03	107
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.06	0.95	0.00	0.00	627	627	0.00	62.6	62.6	—	478	478	< 0.005	< 0.005	< 0.005	479
Vendor	0.01	0.01	0.28	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	246	246	< 0.005	0.04	< 0.005	257
Hauling	< 0.005	< 0.005	0.13	0.03	< 0.005	< 0.005	29.5	29.5	< 0.005	2.94	2.95	—	102	102	< 0.005	0.02	< 0.005	107
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.04	0.88	0.00	0.00	442	442	0.00	44.1	44.1	—	366	366	< 0.005	< 0.005	0.05	367
Vendor	0.01	0.01	0.20	0.08	< 0.005	< 0.005	63.5	63.5	< 0.005	6.35	6.35	—	176	176	< 0.005	0.03	< 0.005	184
Hauling	< 0.005	< 0.005	0.09	0.02	< 0.005	< 0.005	20.8	20.8	< 0.005	2.08	2.08	—	72.8	72.8	< 0.005	0.01	0.01	76.4
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.16	0.00	0.00	80.6	80.6	0.00	8.05	8.05	—	60.6	60.6	< 0.005	< 0.005	0.01	60.7

Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	29.1	29.1	< 0.005	< 0.005	< 0.005	30.4
Hauling	< 0.005	< 0.005	0.02	< 0.005	< 0.005	< 0.005	3.79	3.79	< 0.005	0.38	0.38	—	12.1	12.1	< 0.005	< 0.005	< 0.005	12.6

3.3. Demolition (2046) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.09	1.09	13.5	54.5	0.10	0.19	—	0.19	0.19	—	0.19	—	10,278	10,278	0.42	0.08	—	10,314
Demolition	—	—	—	—	—	—	0.03	0.03	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.09	1.09	13.5	54.5	0.10	0.19	—	0.19	0.19	—	0.19	—	10,278	10,278	0.42	0.08	—	10,314
Demolition	—	—	—	—	—	—	0.03	0.03	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.78	0.78	9.65	38.9	0.07	0.14	—	0.14	0.14	—	0.14	—	7,342	7,342	0.30	0.06	—	7,367

Demoliti	—	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.14	1.76	7.11	0.01	0.02	—	0.02	0.02	—	0.02	—	1,215	1,215	0.05	0.01	—	1,220
Demolition	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.07	0.05	1.72	0.00	0.00	627	627	0.00	62.6	62.6	—	561	561	< 0.005	< 0.005	0.15	562
Vendor	0.01	0.01	0.25	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	244	244	< 0.005	0.04	0.01	255
Hauling	< 0.005	< 0.005	0.12	0.03	< 0.005	< 0.005	29.5	29.5	< 0.005	2.94	2.95	—	102	102	< 0.005	0.02	0.03	107
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.05	0.95	0.00	0.00	627	627	0.00	62.6	62.6	—	476	476	< 0.005	< 0.005	< 0.005	477
Vendor	0.01	0.01	0.28	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	244	244	< 0.005	0.04	< 0.005	255
Hauling	< 0.005	< 0.005	0.13	0.03	< 0.005	< 0.005	29.5	29.5	< 0.005	2.94	2.95	—	102	102	< 0.005	0.02	< 0.005	107
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.04	0.86	0.00	0.00	442	442	0.00	44.1	44.1	—	365	365	< 0.005	< 0.005	0.05	366
Vendor	0.01	0.01	0.19	0.08	< 0.005	< 0.005	63.5	63.5	< 0.005	6.35	6.35	—	174	174	< 0.005	0.03	< 0.005	182
Hauling	< 0.005	< 0.005	0.09	0.02	< 0.005	< 0.005	20.8	20.8	< 0.005	2.08	2.08	—	72.7	72.7	< 0.005	0.01	0.01	76.2
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.16	0.00	0.00	80.6	80.6	0.00	8.05	8.05	—	60.4	60.4	< 0.005	< 0.005	0.01	60.5

Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	28.9	28.9	< 0.005	< 0.005	< 0.005	30.2
Hauling	< 0.005	< 0.005	0.02	< 0.005	< 0.005	< 0.005	3.79	3.79	< 0.005	0.38	0.38	—	12.0	12.0	< 0.005	< 0.005	< 0.005	12.6

3.5. Demolition (2047) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.09	1.09	13.5	54.5	0.10	0.19	—	0.19	0.19	—	0.19	—	10,278	10,278	0.42	0.08	—	10,314
Demolition	—	—	—	—	—	—	0.03	0.03	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.09	1.09	13.5	54.5	0.10	0.19	—	0.19	0.19	—	0.19	—	10,278	10,278	0.42	0.08	—	10,314
Demolition	—	—	—	—	—	—	0.03	0.03	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.78	0.78	9.65	38.9	0.07	0.14	—	0.14	0.14	—	0.14	—	7,342	7,342	0.30	0.06	—	7,367

Demoliti	—	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.14	1.76	7.11	0.01	0.02	—	0.02	0.02	—	0.02	—	1,215	1,215	0.05	0.01	—	1,220
Demolition	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.07	0.05	1.70	0.00	0.00	627	627	0.00	62.6	62.6	—	559	559	< 0.005	< 0.005	0.13	560
Vendor	0.01	0.01	0.25	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	242	242	< 0.005	0.03	< 0.005	253
Hauling	< 0.005	< 0.005	0.12	0.03	< 0.005	< 0.005	29.5	29.5	< 0.005	2.94	2.95	—	102	102	< 0.005	0.02	0.02	107
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.05	0.95	0.00	0.00	627	627	0.00	62.6	62.6	—	475	475	< 0.005	< 0.005	< 0.005	476
Vendor	0.01	0.01	0.28	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	243	243	< 0.005	0.03	< 0.005	253
Hauling	< 0.005	< 0.005	0.13	0.03	< 0.005	< 0.005	29.5	29.5	< 0.005	2.94	2.95	—	102	102	< 0.005	0.02	< 0.005	107
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.04	0.86	0.00	0.00	442	442	0.00	44.1	44.1	—	364	364	< 0.005	< 0.005	0.04	365
Vendor	0.01	0.01	0.19	0.08	< 0.005	< 0.005	63.5	63.5	< 0.005	6.35	6.35	—	173	173	< 0.005	0.02	< 0.005	180
Hauling	< 0.005	< 0.005	0.09	0.02	< 0.005	< 0.005	20.8	20.8	< 0.005	2.08	2.08	—	72.6	72.6	< 0.005	0.01	0.01	76.2
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.16	0.00	0.00	80.6	80.6	0.00	8.05	8.05	—	60.2	60.2	< 0.005	< 0.005	0.01	60.4

Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	28.7	28.7	< 0.005	< 0.005	< 0.005	29.9
Hauling	< 0.005	< 0.005	0.02	< 0.005	< 0.005	< 0.005	3.79	3.79	< 0.005	0.38	0.38	—	12.0	12.0	< 0.005	< 0.005	< 0.005	12.6

3.7. Demolition (2048) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.09	1.09	13.5	54.5	0.10	0.19	—	0.19	0.19	—	0.19	—	10,278	10,278	0.42	0.08	—	10,313
Demolition	—	—	—	—	—	—	0.03	0.03	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.09	1.09	13.5	54.5	0.10	0.19	—	0.19	0.19	—	0.19	—	10,278	10,278	0.42	0.08	—	10,313
Demolition	—	—	—	—	—	—	0.03	0.03	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.78	0.78	9.68	39.0	0.07	0.14	—	0.14	0.14	—	0.14	—	7,361	7,361	0.30	0.06	—	7,386

Demoliti	—	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.14	1.77	7.13	0.01	0.02	—	0.02	0.02	—	0.02	—	1,219	1,219	0.05	0.01	—	1,223
Demolition	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.05	1.70	0.00	0.00	627	627	0.00	62.6	62.6	—	558	558	< 0.005	< 0.005	0.11	559
Vendor	0.01	0.01	0.25	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	241	241	< 0.005	0.03	< 0.005	251
Hauling	< 0.005	< 0.005	0.12	0.03	< 0.005	< 0.005	29.5	29.5	< 0.005	2.94	2.95	—	102	102	< 0.005	0.02	0.02	106
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.05	0.93	0.00	0.00	627	627	0.00	62.6	62.6	—	474	474	< 0.005	< 0.005	< 0.005	475
Vendor	0.01	0.01	0.28	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	241	241	< 0.005	0.03	< 0.005	251
Hauling	< 0.005	< 0.005	0.13	0.03	< 0.005	< 0.005	29.5	29.5	< 0.005	2.94	2.95	—	102	102	< 0.005	0.02	< 0.005	107
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.04	0.86	0.00	0.00	443	443	0.00	44.2	44.2	—	364	364	< 0.005	< 0.005	0.03	365
Vendor	0.01	0.01	0.19	0.08	< 0.005	< 0.005	63.7	63.7	< 0.005	6.37	6.37	—	173	173	< 0.005	0.02	< 0.005	180
Hauling	< 0.005	< 0.005	0.09	0.02	< 0.005	< 0.005	20.8	20.8	< 0.005	2.08	2.08	—	72.8	72.8	< 0.005	0.01	0.01	76.3
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.16	0.00	0.00	80.8	80.8	0.00	8.07	8.07	—	60.3	60.3	< 0.005	< 0.005	0.01	60.4

Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	28.6	28.6	< 0.005	< 0.005	< 0.005	29.8
Hauling	< 0.005	< 0.005	0.02	< 0.005	< 0.005	< 0.005	3.80	3.80	< 0.005	0.38	0.38	—	12.0	12.0	< 0.005	< 0.005	< 0.005	12.6

3.9. Demolition (2049) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.09	1.09	13.5	54.5	0.10	0.19	—	0.19	0.19	—	0.19	—	10,278	10,278	0.42	0.08	—	10,314
Demolition	—	—	—	—	—	—	0.03	0.03	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.09	1.09	13.5	54.5	0.10	0.19	—	0.19	0.19	—	0.19	—	10,278	10,278	0.42	0.08	—	10,314
Demolition	—	—	—	—	—	—	0.03	0.03	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.78	0.78	9.65	38.9	0.07	0.14	—	0.14	0.14	—	0.14	—	7,342	7,342	0.30	0.06	—	7,367

Demoliti	—	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.14	1.76	7.11	0.01	0.02	—	0.02	0.02	—	0.02	—	1,215	1,215	0.05	0.01	—	1,220
Demolition	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.05	1.68	0.00	0.00	627	627	0.00	62.6	62.6	—	557	557	< 0.005	< 0.005	0.10	558
Vendor	0.01	0.01	0.25	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	240	240	< 0.005	0.03	< 0.005	250
Hauling	< 0.005	< 0.005	0.12	0.03	< 0.005	< 0.005	29.5	29.5	< 0.005	2.94	2.95	—	101	101	< 0.005	0.02	0.02	106
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.05	0.93	0.00	0.00	627	627	0.00	62.6	62.6	—	473	473	< 0.005	< 0.005	< 0.005	474
Vendor	0.01	0.01	0.28	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	240	240	< 0.005	0.03	< 0.005	250
Hauling	< 0.005	< 0.005	0.13	0.03	< 0.005	< 0.005	29.5	29.5	< 0.005	2.94	2.95	—	102	102	< 0.005	0.02	< 0.005	106
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.04	0.86	0.00	0.00	442	442	0.00	44.1	44.1	—	362	362	< 0.005	< 0.005	0.03	363
Vendor	0.01	0.01	0.19	0.08	< 0.005	< 0.005	63.5	63.5	< 0.005	6.35	6.35	—	171	171	< 0.005	0.02	< 0.005	179
Hauling	< 0.005	< 0.005	0.09	0.02	< 0.005	< 0.005	20.8	20.8	< 0.005	2.08	2.08	—	72.5	72.5	< 0.005	0.01	0.01	76.0
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.16	0.00	0.00	80.6	80.6	0.00	8.05	8.05	—	60.0	60.0	< 0.005	< 0.005	< 0.005	60.1

Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	28.3	28.3	< 0.005	< 0.005	< 0.005	29.6
Hauling	< 0.005	< 0.005	0.02	< 0.005	< 0.005	< 0.005	3.79	3.79	< 0.005	0.38	0.38	—	12.0	12.0	< 0.005	< 0.005	< 0.005	12.6

3.11. Site Preparation (2045) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.49	1.49	7.77	84.9	0.15	0.30	—	0.30	0.30	—	0.30	—	15,887	15,887	0.64	0.13	—	15,942
Dust From Material Movement	—	—	—	—	—	—	15.3	15.3	—	7.88	7.88	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.49	1.49	7.77	84.9	0.15	0.30	—	0.30	0.30	—	0.30	—	15,887	15,887	0.64	0.13	—	15,942
Dust From Material Movement	—	—	—	—	—	—	15.3	15.3	—	7.88	7.88	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	1.07	1.07	5.55	60.7	0.10	0.21	—	0.21	0.21	—	0.21	—	11,348	11,348	0.46	0.09	—	11,387
Dust From Material Movement	—	—	—	—	—	—	11.0	11.0	—	5.63	5.63	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.19	0.19	1.01	11.1	0.02	0.04	—	0.04	0.04	—	0.04	—	1,879	1,879	0.08	0.02	—	1,885
Dust From Material Movement	—	—	—	—	—	—	2.00	2.00	—	1.03	1.03	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.08	0.07	2.02	0.00	0.00	736	736	0.00	73.4	73.4	—	660	660	< 0.005	< 0.005	0.21	662
Vendor	0.01	0.01	0.26	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	246	246	< 0.005	0.04	0.01	257
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.07	1.12	0.00	0.00	736	736	0.00	73.4	73.4	—	561	561	< 0.005	< 0.005	0.01	562
Vendor	0.01	0.01	0.28	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	246	246	< 0.005	0.04	< 0.005	257
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.05	1.03	0.00	0.00	518	518	0.00	51.8	51.8	—	430	430	< 0.005	< 0.005	0.06	431

Vendor	0.01	0.01	0.20	0.08	< 0.005	< 0.005	63.5	63.5	< 0.005	6.35	6.35	—	176	176	< 0.005	0.03	< 0.005	184
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.19	0.00	0.00	94.6	94.6	0.00	9.45	9.45	—	71.2	71.2	< 0.005	< 0.005	0.01	71.3
Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	29.1	29.1	< 0.005	< 0.005	< 0.005	30.4
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Site Preparation (2046) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.49	1.49	7.77	84.9	0.15	0.30	—	0.30	0.30	—	0.30	—	15,888	15,888	0.64	0.13	—	15,943
Dust From Material Movement	—	—	—	—	—	—	15.3	15.3	—	7.88	7.88	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.49	1.49	7.77	84.9	0.15	0.30	—	0.30	0.30	—	0.30	—	15,888	15,888	0.64	0.13	—	15,943

Dust From Material Movement	—	—	—	—	—	—	15.3	15.3	—	7.88	7.88	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.07	1.07	5.55	60.7	0.10	0.21	—	0.21	0.21	—	0.21	—	11,349	11,349	0.46	0.09	—	11,388
Dust From Material Movement	—	—	—	—	—	—	11.0	11.0	—	5.63	5.63	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.19	0.19	1.01	11.1	0.02	0.04	—	0.04	0.04	—	0.04	—	1,879	1,879	0.08	0.02	—	1,885
Dust From Material Movement	—	—	—	—	—	—	2.00	2.00	—	1.03	1.03	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.08	0.06	2.02	0.00	0.00	736	736	0.00	73.4	73.4	—	658	658	< 0.005	< 0.005	0.18	660
Vendor	0.01	0.01	0.25	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	244	244	< 0.005	0.04	0.01	255
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.06	1.12	0.00	0.00	736	736	0.00	73.4	73.4	—	559	559	< 0.005	< 0.005	< 0.005	560
Vendor	0.01	0.01	0.28	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	244	244	< 0.005	0.04	< 0.005	255
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.05	1.01	0.00	0.00	518	518	0.00	51.8	51.8	—	428	428	< 0.005	< 0.005	0.06	429
Vendor	0.01	0.01	0.19	0.08	< 0.005	< 0.005	63.5	63.5	< 0.005	6.35	6.35	—	174	174	< 0.005	0.03	< 0.005	182
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.18	0.00	0.00	94.6	94.6	0.00	9.45	9.45	—	70.9	70.9	< 0.005	< 0.005	0.01	71.1
Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	28.9	28.9	< 0.005	< 0.005	< 0.005	30.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.15. Site Preparation (2047) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.49	1.49	7.77	84.9	0.15	0.30	—	0.30	0.30	—	0.30	—	15,888	15,888	0.64	0.13	—	15,943
Dust From Material Movement	—	—	—	—	—	—	15.3	15.3	—	7.88	7.88	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.49	1.49	7.77	84.9	0.15	0.30	—	0.30	0.30	—	0.30	—	15,888	15,888	0.64	0.13	—	15,943
Dust From Material Movement	—	—	—	—	—	—	15.3	15.3	—	7.88	7.88	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.07	1.07	5.55	60.7	0.10	0.21	—	0.21	0.21	—	0.21	—	11,349	11,349	0.46	0.09	—	11,388
Dust From Material Movement	—	—	—	—	—	—	11.0	11.0	—	5.63	5.63	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.19	0.19	1.01	11.1	0.02	0.04	—	0.04	0.04	—	0.04	—	1,879	1,879	0.08	0.02	—	1,885
Dust From Material Movement	—	—	—	—	—	—	2.00	2.00	—	1.03	1.03	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.08	0.06	2.00	0.00	0.00	736	736	0.00	73.4	73.4	—	656	656	< 0.005	< 0.005	0.15	658
Vendor	0.01	0.01	0.25	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	242	242	< 0.005	0.03	< 0.005	253
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.06	1.11	0.00	0.00	736	736	0.00	73.4	73.4	—	557	557	< 0.005	< 0.005	< 0.005	559
Vendor	0.01	0.01	0.28	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	243	243	< 0.005	0.03	< 0.005	253
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.05	1.01	0.00	0.00	518	518	0.00	51.8	51.8	—	427	427	< 0.005	< 0.005	0.05	428
Vendor	0.01	0.01	0.19	0.08	< 0.005	< 0.005	63.5	63.5	< 0.005	6.35	6.35	—	173	173	< 0.005	0.02	< 0.005	180
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.18	0.00	0.00	94.6	94.6	0.00	9.45	9.45	—	70.7	70.7	< 0.005	< 0.005	0.01	70.9
Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	28.7	28.7	< 0.005	< 0.005	< 0.005	29.9
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.17. Site Preparation (2048) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	1.49	1.49	7.77	84.9	0.15	0.30	—	0.30	0.30	—	0.30	—	15,887	15,887	0.64	0.13	—	15,942
Dust From Material Movement	—	—	—	—	—	—	15.3	15.3	—	7.88	7.88	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.49	1.49	7.77	84.9	0.15	0.30	—	0.30	0.30	—	0.30	—	15,887	15,887	0.64	0.13	—	15,942
Dust From Material Movement	—	—	—	—	—	—	15.3	15.3	—	7.88	7.88	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.07	1.07	5.56	60.8	0.11	0.21	—	0.21	0.21	—	0.21	—	11,379	11,379	0.46	0.09	—	11,418
Dust From Material Movement	—	—	—	—	—	—	11.0	11.0	—	5.64	5.64	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.20	0.20	1.02	11.1	0.02	0.04	—	0.04	0.04	—	0.04	—	1,884	1,884	0.08	0.02	—	1,890

Dust From Material Movement	—	—	—	—	—	—	2.00	2.00	—	1.03	1.03	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.06	2.00	0.00	0.00	736	736	0.00	73.4	73.4	—	655	655	< 0.005	< 0.005	0.13	656
Vendor	0.01	0.01	0.25	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	241	241	< 0.005	0.03	< 0.005	251
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.06	1.09	0.00	0.00	736	736	0.00	73.4	73.4	—	556	556	< 0.005	< 0.005	< 0.005	557
Vendor	0.01	0.01	0.28	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	241	241	< 0.005	0.03	< 0.005	251
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.05	1.01	0.00	0.00	520	520	0.00	51.9	51.9	—	427	427	< 0.005	< 0.005	0.04	428
Vendor	0.01	0.01	0.19	0.08	< 0.005	< 0.005	63.7	63.7	< 0.005	6.37	6.37	—	173	173	< 0.005	0.02	< 0.005	180
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.18	0.00	0.00	94.9	94.9	0.00	9.47	9.47	—	70.8	70.8	< 0.005	< 0.005	0.01	70.9
Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	28.6	28.6	< 0.005	< 0.005	< 0.005	29.8
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.19. Site Preparation (2049) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.49	1.49	7.77	84.9	0.15	0.30	—	0.30	0.30	—	0.30	—	15,888	15,888	0.64	0.13	—	15,943
Dust From Material Movement	—	—	—	—	—	—	15.3	15.3	—	7.88	7.88	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.49	1.49	7.77	84.9	0.15	0.30	—	0.30	0.30	—	0.30	—	15,888	15,888	0.64	0.13	—	15,943
Dust From Material Movement	—	—	—	—	—	—	15.3	15.3	—	7.88	7.88	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.07	1.07	5.55	60.7	0.10	0.21	—	0.21	0.21	—	0.21	—	11,349	11,349	0.46	0.09	—	11,388
Dust From Material Movement	—	—	—	—	—	—	11.0	11.0	—	5.63	5.63	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.19	0.19	1.01	11.1	0.02	0.04	—	0.04	0.04	—	0.04	—	1,879	1,879	0.08	0.02	—	1,885
Dust From Material Movement	—	—	—	—	—	—	2.00	2.00	—	1.03	1.03	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.06	1.97	0.00	0.00	736	736	0.00	73.4	73.4	—	654	654	< 0.005	< 0.005	0.11	655
Vendor	0.01	0.01	0.25	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	240	240	< 0.005	0.03	< 0.005	250
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.06	1.09	0.00	0.00	736	736	0.00	73.4	73.4	—	555	555	< 0.005	< 0.005	< 0.005	556
Vendor	0.01	0.01	0.28	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	240	240	< 0.005	0.03	< 0.005	250
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.05	1.01	0.00	0.00	518	518	0.00	51.8	51.8	—	425	425	< 0.005	< 0.005	0.03	426
Vendor	0.01	0.01	0.19	0.08	< 0.005	< 0.005	63.5	63.5	< 0.005	6.35	6.35	—	171	171	< 0.005	0.02	< 0.005	179
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.18	0.00	0.00	94.6	94.6	0.00	9.45	9.45	—	70.4	70.4	< 0.005	< 0.005	0.01	70.6

Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	28.3	28.3	< 0.005	< 0.005	< 0.005	29.6
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.21. Grading (2045) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.92	1.92	13.3	106	0.18	0.37	—	0.37	0.37	—	0.37	—	19,788	19,788	0.80	0.16	—	19,856
Dust From Material Movement	—	—	—	—	—	—	7.18	7.18	—	2.85	2.85	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.92	1.92	13.3	106	0.18	0.37	—	0.37	0.37	—	0.37	—	19,788	19,788	0.80	0.16	—	19,856
Dust From Material Movement	—	—	—	—	—	—	7.18	7.18	—	2.85	2.85	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	1.37	1.37	9.48	75.7	0.13	0.27	—	0.27	0.27	—	0.27	—	14,134	14,134	0.57	0.11	—	14,183
Dust From Material Movement	—	—	—	—	—	—	5.13	5.13	—	2.04	2.04	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.25	0.25	1.73	13.8	0.02	0.05	—	0.05	0.05	—	0.05	—	2,340	2,340	0.09	0.02	—	2,348
Dust From Material Movement	—	—	—	—	—	—	0.94	0.94	—	0.37	0.37	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.09	0.07	2.25	0.00	0.00	817	817	0.00	81.6	81.6	—	734	734	< 0.005	< 0.005	0.23	735
Vendor	0.01	0.01	0.26	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	246	246	< 0.005	0.04	0.01	257
Hauling	0.05	0.03	1.40	0.38	0.01	0.03	354	354	0.03	35.3	35.4	—	1,223	1,223	< 0.005	0.20	0.36	1,283
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.07	1.24	0.00	0.00	817	817	0.00	81.6	81.6	—	623	623	0.01	< 0.005	0.01	624
Vendor	0.01	0.01	0.28	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	246	246	< 0.005	0.04	< 0.005	257
Hauling	0.05	0.03	1.54	0.39	0.01	0.03	354	354	0.03	35.3	35.4	—	1,225	1,225	< 0.005	0.20	0.01	1,284
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.05	1.14	0.00	0.00	576	576	0.00	57.5	57.5	—	478	478	< 0.005	< 0.005	0.07	479

Vendor	0.01	0.01	0.20	0.08	< 0.005	< 0.005	63.5	63.5	< 0.005	6.35	6.35	—	176	176	< 0.005	0.03	< 0.005	184
Hauling	0.03	0.02	1.08	0.27	0.01	0.02	249	249	0.02	24.9	24.9	—	874	874	< 0.005	0.14	0.11	916
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.21	0.00	0.00	105	105	0.00	10.5	10.5	—	79.1	79.1	< 0.005	< 0.005	0.01	79.2
Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	29.1	29.1	< 0.005	< 0.005	< 0.005	30.4
Hauling	0.01	< 0.005	0.20	0.05	< 0.005	< 0.005	45.5	45.5	< 0.005	4.55	4.55	—	145	145	< 0.005	0.02	0.02	152

3.23. Grading (2046) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.92	1.92	13.3	106	0.18	0.37	—	0.37	0.37	—	0.37	—	19,788	19,788	0.80	0.16	—	19,856
Dust From Material Movement	—	—	—	—	—	—	7.18	7.18	—	2.85	2.85	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.92	1.92	13.3	106	0.18	0.37	—	0.37	0.37	—	0.37	—	19,788	19,788	0.80	0.16	—	19,856

Dust From Material Movement	—	—	—	—	—	—	7.18	7.18	—	2.85	2.85	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.37	1.37	9.48	75.7	0.13	0.27	—	0.27	0.27	—	0.27	—	14,135	14,135	0.57	0.11	—	14,183
Dust From Material Movement	—	—	—	—	—	—	5.13	5.13	—	2.04	2.04	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.25	0.25	1.73	13.8	0.02	0.05	—	0.05	0.05	—	0.05	—	2,340	2,340	0.09	0.02	—	2,348
Dust From Material Movement	—	—	—	—	—	—	0.94	0.94	—	0.37	0.37	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.09	0.07	2.25	0.00	0.00	817	817	0.00	81.6	81.6	—	731	731	< 0.005	< 0.005	0.20	733
Vendor	0.01	0.01	0.25	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	244	244	< 0.005	0.04	0.01	255
Hauling	0.05	0.03	1.39	0.38	0.01	0.03	354	354	0.03	35.3	35.4	—	1,221	1,221	< 0.005	0.20	0.31	1,281

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.07	1.24	0.00	0.00	817	817	0.00	81.6	81.6	—	621	621	0.01	< 0.005	0.01	622
Vendor	0.01	0.01	0.28	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	244	244	< 0.005	0.04	< 0.005	255
Hauling	0.05	0.03	1.54	0.39	0.01	0.03	354	354	0.03	35.3	35.4	—	1,223	1,223	< 0.005	0.20	0.01	1,282
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.05	1.12	0.00	0.00	576	576	0.00	57.5	57.5	—	476	476	< 0.005	< 0.005	0.06	477
Vendor	0.01	0.01	0.19	0.08	< 0.005	< 0.005	63.5	63.5	< 0.005	6.35	6.35	—	174	174	< 0.005	0.03	< 0.005	182
Hauling	0.03	0.02	1.08	0.27	0.01	0.02	249	249	0.02	24.9	24.9	—	873	873	< 0.005	0.14	0.10	915
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.21	0.00	0.00	105	105	0.00	10.5	10.5	—	78.8	78.8	< 0.005	< 0.005	0.01	79.0
Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	28.9	28.9	< 0.005	< 0.005	< 0.005	30.2
Hauling	0.01	< 0.005	0.20	0.05	< 0.005	< 0.005	45.5	45.5	< 0.005	4.55	4.55	—	145	145	< 0.005	0.02	0.02	151

3.25. Grading (2047) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.92	1.92	13.3	106	0.18	0.37	—	0.37	0.37	—	0.37	—	19,788	19,788	0.80	0.16	—	19,856
Dust From Material Movement	—	—	—	—	—	—	7.18	7.18	—	2.85	2.85	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.92	1.92	13.3	106	0.18	0.37	—	0.37	0.37	—	0.37	—	19,788	19,788	0.80	0.16	—	19,856
Dust From Material Movement	—	—	—	—	—	—	7.18	7.18	—	2.85	2.85	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.37	1.37	9.48	75.7	0.13	0.27	—	0.27	0.27	—	0.27	—	14,135	14,135	0.57	0.11	—	14,183
Dust From Material Movement	—	—	—	—	—	—	5.13	5.13	—	2.04	2.04	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.25	0.25	1.73	13.8	0.02	0.05	—	0.05	0.05	—	0.05	—	2,340	2,340	0.09	0.02	—	2,348
Dust From Material Movement	—	—	—	—	—	—	0.94	0.94	—	0.37	0.37	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.09	0.07	2.22	0.00	0.00	817	817	0.00	81.6	81.6	—	729	729	< 0.005	< 0.005	0.17	731
Vendor	0.01	0.01	0.25	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	242	242	< 0.005	0.03	< 0.005	253
Hauling	0.04	0.03	1.39	0.38	0.01	0.03	354	354	0.03	35.3	35.4	—	1,220	1,220	< 0.005	0.20	0.27	1,279
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.07	1.24	0.00	0.00	817	817	0.00	81.6	81.6	—	619	619	0.01	< 0.005	< 0.005	621
Vendor	0.01	0.01	0.28	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	243	243	< 0.005	0.03	< 0.005	253
Hauling	0.04	0.03	1.54	0.39	0.01	0.03	354	354	0.03	35.3	35.4	—	1,221	1,221	< 0.005	0.20	0.01	1,280
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.05	1.12	0.00	0.00	576	576	0.00	57.5	57.5	—	475	475	< 0.005	< 0.005	0.05	476
Vendor	0.01	0.01	0.19	0.08	< 0.005	< 0.005	63.5	63.5	< 0.005	6.35	6.35	—	173	173	< 0.005	0.02	< 0.005	180
Hauling	0.03	0.02	1.08	0.27	0.01	0.02	249	249	0.02	24.9	24.9	—	872	872	< 0.005	0.14	0.08	914
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.20	0.00	0.00	105	105	0.00	10.5	10.5	—	78.6	78.6	< 0.005	< 0.005	0.01	78.7
Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	28.7	28.7	< 0.005	< 0.005	< 0.005	29.9
Hauling	< 0.005	< 0.005	0.20	0.05	< 0.005	< 0.005	45.5	45.5	< 0.005	4.55	4.55	—	144	144	< 0.005	0.02	0.01	151

3.27. Grading (2048) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	1.92	1.92	13.3	106	0.18	0.37	—	0.37	0.37	—	0.37	—	19,788	19,788	0.80	0.16	—	19,856
Dust From Material Movement	—	—	—	—	—	—	7.18	7.18	—	2.85	2.85	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.92	1.92	13.3	106	0.18	0.37	—	0.37	0.37	—	0.37	—	19,788	19,788	0.80	0.16	—	19,856
Dust From Material Movement	—	—	—	—	—	—	7.18	7.18	—	2.85	2.85	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.37	1.37	9.51	76.0	0.13	0.27	—	0.27	0.27	—	0.27	—	14,173	14,173	0.57	0.11	—	14,222
Dust From Material Movement	—	—	—	—	—	—	5.14	5.14	—	2.04	2.04	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.25	0.25	1.74	13.9	0.02	0.05	—	0.05	0.05	—	0.05	—	2,347	2,347	0.10	0.02	—	2,355

Dust From Material Movement	—	—	—	—	—	—	0.94	0.94	—	0.37	0.37	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.09	0.07	2.22	0.00	0.00	817	817	0.00	81.6	81.6	—	728	728	< 0.005	< 0.005	0.14	729
Vendor	0.01	0.01	0.25	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	241	241	< 0.005	0.03	< 0.005	251
Hauling	0.04	0.03	1.39	0.37	0.01	0.03	354	354	0.03	35.3	35.4	—	1,219	1,219	< 0.005	0.20	0.23	1,278
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.07	1.21	0.00	0.00	817	817	0.00	81.6	81.6	—	618	618	< 0.005	< 0.005	< 0.005	619
Vendor	0.01	0.01	0.28	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	241	241	< 0.005	0.03	< 0.005	251
Hauling	0.04	0.03	1.54	0.38	0.01	0.03	354	354	0.03	35.3	35.4	—	1,220	1,220	< 0.005	0.20	0.01	1,279
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.05	1.12	0.00	0.00	578	578	0.00	57.7	57.7	—	475	475	< 0.005	< 0.005	0.04	476
Vendor	0.01	0.01	0.19	0.08	< 0.005	< 0.005	63.7	63.7	< 0.005	6.37	6.37	—	173	173	< 0.005	0.02	< 0.005	180
Hauling	0.03	0.02	1.07	0.27	0.01	0.02	250	250	0.02	25.0	25.0	—	873	873	< 0.005	0.14	0.07	915
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.21	0.00	0.00	105	105	0.00	10.5	10.5	—	78.6	78.6	< 0.005	< 0.005	0.01	78.8
Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	28.6	28.6	< 0.005	< 0.005	< 0.005	29.8
Hauling	< 0.005	< 0.005	0.20	0.05	< 0.005	< 0.005	45.6	45.6	< 0.005	4.56	4.56	—	145	145	< 0.005	0.02	0.01	152

3.29. Grading (2049) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.92	1.92	13.3	106	0.18	0.37	—	0.37	0.37	—	0.37	—	19,788	19,788	0.80	0.16	—	19,856
Dust From Material Movement	—	—	—	—	—	—	7.18	7.18	—	2.85	2.85	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.92	1.92	13.3	106	0.18	0.37	—	0.37	0.37	—	0.37	—	19,788	19,788	0.80	0.16	—	19,856
Dust From Material Movement	—	—	—	—	—	—	7.18	7.18	—	2.85	2.85	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.37	1.37	9.48	75.7	0.13	0.27	—	0.27	0.27	—	0.27	—	14,135	14,135	0.57	0.11	—	14,183
Dust From Material Movement	—	—	—	—	—	—	5.13	5.13	—	2.04	2.04	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.25	0.25	1.73	13.8	0.02	0.05	—	0.05	0.05	—	0.05	—	2,340	2,340	0.09	0.02	—	2,348
Dust From Material Movement	—	—	—	—	—	—	0.94	0.94	—	0.37	0.37	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.09	0.07	2.19	0.00	0.00	817	817	0.00	81.6	81.6	—	726	726	< 0.005	< 0.005	0.12	728
Vendor	0.01	0.01	0.25	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	240	240	< 0.005	0.03	< 0.005	250
Hauling	0.04	0.03	1.39	0.37	0.01	0.03	354	354	0.03	35.3	35.4	—	1,218	1,218	< 0.005	0.20	0.20	1,277
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.07	1.21	0.00	0.00	817	817	0.00	81.6	81.6	—	617	617	< 0.005	< 0.005	< 0.005	618
Vendor	0.01	0.01	0.28	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	240	240	< 0.005	0.03	< 0.005	250
Hauling	0.04	0.03	1.53	0.38	0.01	0.03	354	354	0.03	35.3	35.4	—	1,219	1,219	< 0.005	0.20	0.01	1,278
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.05	1.12	0.00	0.00	576	576	0.00	57.5	57.5	—	473	473	< 0.005	< 0.005	0.04	474
Vendor	0.01	0.01	0.19	0.08	< 0.005	< 0.005	63.5	63.5	< 0.005	6.35	6.35	—	171	171	< 0.005	0.02	< 0.005	179
Hauling	0.03	0.02	1.07	0.27	0.01	0.02	249	249	0.02	24.9	24.9	—	870	870	< 0.005	0.14	0.06	912
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.20	0.00	0.00	105	105	0.00	10.5	10.5	—	78.3	78.3	< 0.005	< 0.005	0.01	78.4

Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	28.3	28.3	< 0.005	< 0.005	< 0.005	29.6
Hauling	< 0.005	< 0.005	0.20	0.05	< 0.005	< 0.005	45.5	45.5	< 0.005	4.55	4.55	—	144	144	< 0.005	0.02	0.01	151

3.31. Building Construction (2045) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.78	0.78	8.78	46.9	0.07	0.14	—	0.14	0.14	—	0.14	—	7,435	7,435	0.30	0.06	—	7,461
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.78	0.78	8.78	46.9	0.07	0.14	—	0.14	0.14	—	0.14	—	7,435	7,435	0.30	0.06	—	7,461
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.56	0.56	6.27	33.5	0.05	0.10	—	0.10	0.10	—	0.10	—	5,311	5,311	0.22	0.04	—	5,329
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.10	0.10	1.15	6.12	0.01	0.02	—	0.02	0.02	—	0.02	—	879	879	0.04	0.01	—	882
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.63	2.84	2.23	69.0	0.00	0.00	25,090	25,090	0.00	2,505	2,505	—	22,527	22,527	0.12	0.12	7.14	22,573
Vendor	0.70	0.61	15.4	6.47	0.16	0.32	5,408	5,408	0.16	540	541	—	14,750	14,750	0.06	2.23	0.47	15,417
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.60	2.52	2.23	38.2	0.00	0.00	25,090	25,090	0.00	2,505	2,505	—	19,129	19,129	0.16	0.12	0.18	19,170
Vendor	0.65	0.54	16.8	6.76	0.16	0.32	5,408	5,408	0.16	540	541	—	14,773	14,773	0.06	2.23	0.01	15,440
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.89	1.86	1.57	35.1	0.00	0.00	17,686	17,686	0.00	1,766	1,766	—	14,661	14,661	0.09	0.09	2.20	14,691
Vendor	0.48	0.41	11.7	4.70	0.12	0.23	3,812	3,812	0.12	381	381	—	10,543	10,543	0.05	1.59	0.14	11,019
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.34	0.34	0.29	6.41	0.00	0.00	3,228	3,228	0.00	322	322	—	2,427	2,427	0.01	0.01	0.36	2,432
Vendor	0.09	0.07	2.14	0.86	0.02	0.04	696	696	0.02	69.5	69.5	—	1,745	1,745	0.01	0.26	0.02	1,824
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.33. Building Construction (2046) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.78	0.78	8.78	46.9	0.07	0.14	—	0.14	0.14	—	0.14	—	7,435	7,435	0.30	0.06	—	7,461
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.78	0.78	8.78	46.9	0.07	0.14	—	0.14	0.14	—	0.14	—	7,435	7,435	0.30	0.06	—	7,461
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.56	0.56	6.27	33.5	0.05	0.10	—	0.10	0.10	—	0.10	—	5,311	5,311	0.22	0.04	—	5,329
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.10	1.15	6.12	0.01	0.02	—	0.02	0.02	—	0.02	—	879	879	0.04	0.01	—	882
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	3.59	2.80	2.19	68.9	0.00	0.00	25,090	25,090	0.00	2,505	2,505	—	22,453	22,453	0.12	0.12	6.08	22,499
Vendor	0.70	0.61	15.2	6.47	0.16	0.32	5,408	5,408	0.16	540	541	—	14,633	14,633	0.06	2.23	0.31	15,300
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.48	2.44	2.19	38.1	0.00	0.00	25,090	25,090	0.00	2,505	2,505	—	19,068	19,068	0.16	0.12	0.16	19,109
Vendor	0.62	0.54	16.7	6.74	0.16	0.32	5,408	5,408	0.16	540	541	—	14,657	14,657	0.06	2.23	0.01	15,324
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.86	1.83	1.54	34.5	0.00	0.00	17,686	17,686	0.00	1,766	1,766	—	14,614	14,614	0.09	0.09	1.88	14,644
Vendor	0.48	0.41	11.6	4.70	0.12	0.23	3,812	3,812	0.12	381	381	—	10,459	10,459	0.05	1.59	0.09	10,936
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.34	0.33	0.28	6.30	0.00	0.00	3,228	3,228	0.00	322	322	—	2,419	2,419	0.01	0.01	0.31	2,424
Vendor	0.09	0.07	2.12	0.86	0.02	0.04	696	696	0.02	69.5	69.5	—	1,732	1,732	0.01	0.26	0.02	1,811
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.35. Building Construction (2047) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.78	0.78	8.78	46.9	0.07	0.14	—	0.14	0.14	—	0.14	—	7,435	7,435	0.30	0.06	—	7,461

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.78	0.78	8.78	46.9	0.07	0.14	—	0.14	0.14	—	0.14	—	7,435	7,435	0.30	0.06	—	7,461
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.56	0.56	6.27	33.5	0.05	0.10	—	0.10	0.10	—	0.10	—	5,311	5,311	0.22	0.04	—	5,329
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.10	1.15	6.12	0.01	0.02	—	0.02	0.02	—	0.02	—	879	879	0.04	0.01	—	882
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.55	2.76	2.19	68.1	0.00	0.00	25,090	25,090	0.00	2,505	2,505	—	22,389	22,389	0.12	0.12	5.17	22,434
Vendor	0.70	0.61	15.2	6.45	0.16	0.32	5,408	5,408	0.16	540	541	—	14,533	14,533	0.06	2.07	0.20	15,151
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	2.48	2.44	2.19	38.0	0.00	0.00	25,090	25,090	0.00	2,505	2,505	—	19,015	19,015	0.16	0.12	0.13	19,055
Vendor	0.62	0.54	16.7	6.72	0.16	0.32	5,408	5,408	0.16	540	541	—	14,556	14,556	0.06	2.07	0.01	15,175
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.83	1.80	1.54	34.5	0.00	0.00	17,686	17,686	0.00	1,766	1,766	—	14,572	14,572	0.09	0.09	1.60	14,602
Vendor	0.47	0.41	11.6	4.69	0.12	0.23	3,812	3,812	0.12	381	381	—	10,388	10,388	0.05	1.48	0.06	10,829
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.33	0.33	0.28	6.29	0.00	0.00	3,228	3,228	0.00	322	322	—	2,413	2,413	0.01	0.01	0.26	2,418
Vendor	0.09	0.07	2.12	0.86	0.02	0.04	696	696	0.02	69.5	69.5	—	1,720	1,720	0.01	0.24	0.01	1,793
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.37. Building Construction (2048) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.78	0.78	8.78	46.9	0.07	0.14	—	0.14	0.14	—	0.14	—	7,435	7,435	0.30	0.06	—	7,461
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.78	0.78	8.78	46.9	0.07	0.14	—	0.14	0.14	—	0.14	—	7,435	7,435	0.30	0.06	—	7,461
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.56	0.56	6.29	33.6	0.05	0.10	—	0.10	0.10	—	0.10	—	5,325	5,325	0.22	0.04	—	5,344
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.10	1.15	6.13	0.01	0.02	—	0.02	0.02	—	0.02	—	882	882	0.04	0.01	—	885
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.80	2.76	2.19	68.1	0.00	0.00	25,090	25,090	0.00	2,505	2,505	—	22,339	22,339	0.12	0.12	4.44	22,383
Vendor	0.69	0.59	15.2	6.44	0.16	0.32	5,408	5,408	0.16	540	541	—	14,447	14,447	0.06	2.07	0.12	15,066
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.44	2.36	2.19	37.2	0.00	0.00	25,090	25,090	0.00	2,505	2,505	—	18,973	18,973	0.12	0.12	0.11	19,013
Vendor	0.62	0.54	16.6	6.71	0.16	0.32	5,408	5,408	0.16	540	541	—	14,471	14,471	0.06	2.07	< 0.005	15,089
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.77	1.72	1.54	34.5	0.00	0.00	17,734	17,734	0.00	1,771	1,771	—	14,580	14,580	0.09	0.09	1.37	14,609
Vendor	0.47	0.41	11.6	4.70	0.12	0.23	3,822	3,823	0.12	382	382	—	10,355	10,355	0.05	1.48	0.04	10,798
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.32	0.31	0.28	6.30	0.00	0.00	3,236	3,236	0.00	323	323	—	2,414	2,414	0.01	0.01	0.23	2,419
Vendor	0.09	0.08	2.12	0.86	0.02	0.04	698	698	0.02	69.7	69.7	—	1,714	1,714	0.01	0.25	0.01	1,788
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.39. Building Construction (2049) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.78	0.78	8.78	46.9	0.07	0.14	—	0.14	0.14	—	0.14	—	7,435	7,435	0.30	0.06	—	7,461
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.78	0.78	8.78	46.9	0.07	0.14	—	0.14	0.14	—	0.14	—	7,435	7,435	0.30	0.06	—	7,461
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.56	0.56	6.27	33.5	0.05	0.10	—	0.10	0.10	—	0.10	—	5,311	5,311	0.22	0.04	—	5,329
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.10	1.15	6.12	0.01	0.02	—	0.02	0.02	—	0.02	—	879	879	0.04	0.01	—	882
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.72	2.68	2.19	67.3	0.00	0.00	25,090	25,090	0.00	2,505	2,505	—	22,299	22,299	0.12	0.12	3.82	22,343
Vendor	0.69	0.59	15.2	6.44	0.16	0.32	5,408	5,408	0.16	540	541	—	14,374	14,374	0.06	2.07	0.07	14,992
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.40	2.36	2.19	37.1	0.00	0.00	25,090	25,090	0.00	2,505	2,505	—	18,939	18,939	0.12	0.12	0.10	18,978
Vendor	0.62	0.54	16.6	6.68	0.16	0.32	5,408	5,408	0.16	540	541	—	14,398	14,398	0.05	2.07	< 0.005	15,016
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.74	1.71	1.54	34.4	0.00	0.00	17,686	17,686	0.00	1,766	1,766	—	14,514	14,514	0.09	0.09	1.18	14,543
Vendor	0.47	0.41	11.6	4.67	0.12	0.23	3,812	3,812	0.12	381	381	—	10,274	10,274	0.05	1.48	0.02	10,716
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.32	0.31	0.28	6.28	0.00	0.00	3,228	3,228	0.00	322	322	—	2,403	2,403	0.01	0.01	0.20	2,408
Vendor	0.09	0.07	2.12	0.85	0.02	0.04	696	696	0.02	69.5	69.5	—	1,701	1,701	0.01	0.24	< 0.005	1,774
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.41. Paving (2045) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.48	0.48	5.80	31.8	0.04	0.08	—	0.08	0.08	—	0.08	—	4,532	4,532	0.18	0.04	—	4,547
Paving	12.7	12.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.48	0.48	5.80	31.8	0.04	0.08	—	0.08	0.08	—	0.08	—	4,532	4,532	0.18	0.04	—	4,547
Paving	12.7	12.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.34	0.34	4.14	22.7	0.03	0.06	—	0.06	0.06	—	0.06	—	3,237	3,237	0.13	0.03	—	3,248

Paving	9.04	9.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	0.76	4.15	0.01	0.01	—	0.01	0.01	—	0.01	—	536	536	0.02	< 0.005	—	538
Paving	1.65	1.65	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.07	0.06	1.72	0.00	0.00	627	627	0.00	62.6	62.6	—	563	563	< 0.005	< 0.005	0.18	564
Vendor	0.01	0.01	0.26	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	246	246	< 0.005	0.04	0.01	257
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.06	0.95	0.00	0.00	627	627	0.00	62.6	62.6	—	478	478	< 0.005	< 0.005	< 0.005	479
Vendor	0.01	0.01	0.28	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	246	246	< 0.005	0.04	< 0.005	257
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.04	0.88	0.00	0.00	442	442	0.00	44.1	44.1	—	366	366	< 0.005	< 0.005	0.05	367
Vendor	0.01	0.01	0.20	0.08	< 0.005	< 0.005	63.5	63.5	< 0.005	6.35	6.35	—	176	176	< 0.005	0.03	< 0.005	184
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.16	0.00	0.00	80.6	80.6	0.00	8.05	8.05	—	60.6	60.6	< 0.005	< 0.005	0.01	60.7
Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	29.1	29.1	< 0.005	< 0.005	< 0.005	30.4

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.43. Paving (2046) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.48	0.48	5.80	31.8	0.04	0.08	—	0.08	0.08	—	0.08	—	4,532	4,532	0.18	0.04	—	4,547
Paving	12.7	12.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.48	0.48	5.80	31.8	0.04	0.08	—	0.08	0.08	—	0.08	—	4,532	4,532	0.18	0.04	—	4,547
Paving	12.7	12.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.34	0.34	4.14	22.7	0.03	0.06	—	0.06	0.06	—	0.06	—	3,237	3,237	0.13	0.03	—	3,248
Paving	9.04	9.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	0.76	4.15	0.01	0.01	—	0.01	0.01	—	0.01	—	536	536	0.02	< 0.005	—	538
Paving	1.65	1.65	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.07	0.05	1.72	0.00	0.00	627	627	0.00	62.6	62.6	—	561	561	< 0.005	< 0.005	0.15	562
Vendor	0.01	0.01	0.25	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	244	244	< 0.005	0.04	0.01	255
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.05	0.95	0.00	0.00	627	627	0.00	62.6	62.6	—	476	476	< 0.005	< 0.005	< 0.005	477
Vendor	0.01	0.01	0.28	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	244	244	< 0.005	0.04	< 0.005	255
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.04	0.86	0.00	0.00	442	442	0.00	44.1	44.1	—	365	365	< 0.005	< 0.005	0.05	366
Vendor	0.01	0.01	0.19	0.08	< 0.005	< 0.005	63.5	63.5	< 0.005	6.35	6.35	—	174	174	< 0.005	0.03	< 0.005	182
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.16	0.00	0.00	80.6	80.6	0.00	8.05	8.05	—	60.4	60.4	< 0.005	< 0.005	0.01	60.5
Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	28.9	28.9	< 0.005	< 0.005	< 0.005	30.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.45. Paving (2047) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.48	0.48	5.80	31.8	0.04	0.08	—	0.08	0.08	—	0.08	—	4,532	4,532	0.18	0.04	—	4,547
Paving	12.7	12.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.48	0.48	5.80	31.8	0.04	0.08	—	0.08	0.08	—	0.08	—	4,532	4,532	0.18	0.04	—	4,547
Paving	12.7	12.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.34	0.34	4.14	22.7	0.03	0.06	—	0.06	0.06	—	0.06	—	3,237	3,237	0.13	0.03	—	3,248
Paving	9.04	9.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.06	0.06	0.76	4.15	0.01	0.01	—	0.01	0.01	—	0.01	—	536	536	0.02	< 0.005	—	538
Paving	1.65	1.65	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.07	0.05	1.70	0.00	0.00	627	627	0.00	62.6	62.6	—	559	559	< 0.005	< 0.005	0.13	560
Vendor	0.01	0.01	0.25	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	242	242	< 0.005	0.03	< 0.005	253
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.05	0.95	0.00	0.00	627	627	0.00	62.6	62.6	—	475	475	< 0.005	< 0.005	< 0.005	476
Vendor	0.01	0.01	0.28	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	243	243	< 0.005	0.03	< 0.005	253
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.04	0.86	0.00	0.00	442	442	0.00	44.1	44.1	—	364	364	< 0.005	< 0.005	0.04	365
Vendor	0.01	0.01	0.19	0.08	< 0.005	< 0.005	63.5	63.5	< 0.005	6.35	6.35	—	173	173	< 0.005	0.02	< 0.005	180
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.16	0.00	0.00	80.6	80.6	0.00	8.05	8.05	—	60.2	60.2	< 0.005	< 0.005	0.01	60.4
Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	28.7	28.7	< 0.005	< 0.005	< 0.005	29.9
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.47. Paving (2048) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.48	0.48	5.80	31.8	0.04	0.08	—	0.08	0.08	—	0.08	—	4,532	4,532	0.18	0.04	—	4,547
Paving	12.7	12.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.48	0.48	5.80	31.8	0.04	0.08	—	0.08	0.08	—	0.08	—	4,532	4,532	0.18	0.04	—	4,547
Paving	12.7	12.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.34	0.34	4.15	22.8	0.03	0.06	—	0.06	0.06	—	0.06	—	3,246	3,246	0.13	0.03	—	3,257
Paving	9.06	9.06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	0.76	4.16	0.01	0.01	—	0.01	0.01	—	0.01	—	537	537	0.02	< 0.005	—	539
Paving	1.65	1.65	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.05	1.70	0.00	0.00	627	627	0.00	62.6	62.6	—	558	558	< 0.005	< 0.005	0.11	559
Vendor	0.01	0.01	0.25	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	241	241	< 0.005	0.03	< 0.005	251
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.05	0.93	0.00	0.00	627	627	0.00	62.6	62.6	—	474	474	< 0.005	< 0.005	< 0.005	475
Vendor	0.01	0.01	0.28	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	241	241	< 0.005	0.03	< 0.005	251
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.04	0.86	0.00	0.00	443	443	0.00	44.2	44.2	—	364	364	< 0.005	< 0.005	0.03	365
Vendor	0.01	0.01	0.19	0.08	< 0.005	< 0.005	63.7	63.7	< 0.005	6.37	6.37	—	173	173	< 0.005	0.02	< 0.005	180
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.16	0.00	0.00	80.8	80.8	0.00	8.07	8.07	—	60.3	60.3	< 0.005	< 0.005	0.01	60.4
Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	28.6	28.6	< 0.005	< 0.005	< 0.005	29.8
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.49. Paving (2049) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.48	0.48	5.80	31.8	0.04	0.08	—	0.08	0.08	—	0.08	—	4,532	4,532	0.18	0.04	—	4,547
Paving	12.7	12.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.48	0.48	5.80	31.8	0.04	0.08	—	0.08	0.08	—	0.08	—	4,532	4,532	0.18	0.04	—	4,547
Paving	12.7	12.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.34	0.34	4.14	22.7	0.03	0.06	—	0.06	0.06	—	0.06	—	3,237	3,237	0.13	0.03	—	3,248
Paving	9.04	9.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	0.76	4.15	0.01	0.01	—	0.01	0.01	—	0.01	—	536	536	0.02	< 0.005	—	538
Paving	1.65	1.65	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.05	1.68	0.00	0.00	627	627	0.00	62.6	62.6	—	557	557	< 0.005	< 0.005	0.10	558
Vendor	0.01	0.01	0.25	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	240	240	< 0.005	0.03	< 0.005	250
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.05	0.93	0.00	0.00	627	627	0.00	62.6	62.6	—	473	473	< 0.005	< 0.005	< 0.005	474
Vendor	0.01	0.01	0.28	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	240	240	< 0.005	0.03	< 0.005	250
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.04	0.86	0.00	0.00	442	442	0.00	44.1	44.1	—	362	362	< 0.005	< 0.005	0.03	363
Vendor	0.01	0.01	0.19	0.08	< 0.005	< 0.005	63.5	63.5	< 0.005	6.35	6.35	—	171	171	< 0.005	0.02	< 0.005	179
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.16	0.00	0.00	80.6	80.6	0.00	8.05	8.05	—	60.0	60.0	< 0.005	< 0.005	< 0.005	60.1
Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	28.3	28.3	< 0.005	< 0.005	< 0.005	29.6
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.51. Architectural Coating (2045) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	1.94	2.89	0.01	0.01	—	0.01	0.01	—	0.01	—	401	401	0.02	< 0.005	—	402
Architectural Coatings	46.7	46.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	1.94	2.89	0.01	0.01	—	0.01	0.01	—	0.01	—	401	401	0.02	< 0.005	—	402
Architectural Coatings	46.7	46.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.05	1.38	2.06	< 0.005	0.01	—	0.01	0.01	—	0.01	—	286	286	0.01	< 0.005	—	287
Architectural Coatings	33.3	33.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.25	0.38	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	47.4	47.4	< 0.005	< 0.005	—	47.5
Architectural Coatings	6.09	6.09	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.73	0.57	0.45	13.9	0.00	0.00	5,067	5,067	0.00	506	506	—	4,549	4,549	0.02	0.02	1.44	4,559
Vendor	0.01	0.01	0.26	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	246	246	< 0.005	0.04	0.01	257
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.52	0.51	0.45	7.71	0.00	0.00	5,067	5,067	0.00	506	506	—	3,863	3,863	0.03	0.02	0.04	3,871
Vendor	0.01	0.01	0.28	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	246	246	< 0.005	0.04	< 0.005	257
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.38	0.37	0.32	7.09	0.00	0.00	3,572	3,572	0.00	357	357	—	2,961	2,961	0.02	0.02	0.44	2,967
Vendor	0.01	0.01	0.20	0.08	< 0.005	< 0.005	63.5	63.5	< 0.005	6.35	6.35	—	176	176	< 0.005	0.03	< 0.005	184
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.06	1.29	0.00	0.00	652	652	0.00	65.1	65.1	—	490	490	< 0.005	< 0.005	0.07	491
Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	29.1	29.1	< 0.005	< 0.005	< 0.005	30.4
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.53. Architectural Coating (2046) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	1.94	2.89	0.01	0.01	—	0.01	0.01	—	0.01	—	401	401	0.02	< 0.005	—	402
Architectural Coatings	46.7	46.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	1.94	2.89	0.01	0.01	—	0.01	0.01	—	0.01	—	401	401	0.02	< 0.005	—	402
Architectural Coatings	46.7	46.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.05	1.38	2.06	< 0.005	0.01	—	0.01	0.01	—	0.01	—	286	286	0.01	< 0.005	—	287

Architect Coatings	33.3	33.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.25	0.38	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	47.4	47.4	< 0.005	< 0.005	—	47.5
Architectural Coatings	6.09	6.09	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.73	0.57	0.44	13.9	0.00	0.00	5,067	5,067	0.00	506	506	—	4,535	4,535	0.02	0.02	1.23	4,544
Vendor	0.01	0.01	0.25	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	244	244	< 0.005	0.04	0.01	255
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.50	0.49	0.44	7.69	0.00	0.00	5,067	5,067	0.00	506	506	—	3,851	3,851	0.03	0.02	0.03	3,859
Vendor	0.01	0.01	0.28	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	244	244	< 0.005	0.04	< 0.005	255
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.37	0.37	0.31	6.97	0.00	0.00	3,572	3,572	0.00	357	357	—	2,951	2,951	0.02	0.02	0.38	2,957
Vendor	0.01	0.01	0.19	0.08	< 0.005	< 0.005	63.5	63.5	< 0.005	6.35	6.35	—	174	174	< 0.005	0.03	< 0.005	182
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.07	0.07	0.06	1.27	0.00	0.00	652	652	0.00	65.1	65.1	—	489	489	< 0.005	< 0.005	0.06	490
Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	28.9	28.9	< 0.005	< 0.005	< 0.005	30.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.55. Architectural Coating (2047) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	1.94	2.89	0.01	0.01	—	0.01	0.01	—	0.01	—	401	401	0.02	< 0.005	—	402
Architectural Coatings	46.7	46.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	1.94	2.89	0.01	0.01	—	0.01	0.01	—	0.01	—	401	401	0.02	< 0.005	—	402
Architectural Coatings	46.7	46.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.05	1.38	2.06	< 0.005	0.01	—	0.01	0.01	—	0.01	—	286	286	0.01	< 0.005	—	287
Architectural Coatings	33.3	33.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.25	0.38	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	47.4	47.4	< 0.005	< 0.005	—	47.5
Architectural Coatings	6.09	6.09	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.72	0.56	0.44	13.8	0.00	0.00	5,067	5,067	0.00	506	506	—	4,522	4,522	0.02	0.02	1.04	4,531
Vendor	0.01	0.01	0.25	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	242	242	< 0.005	0.03	< 0.005	253
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.50	0.49	0.44	7.67	0.00	0.00	5,067	5,067	0.00	506	506	—	3,840	3,840	0.03	0.02	0.03	3,848
Vendor	0.01	0.01	0.28	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	243	243	< 0.005	0.03	< 0.005	253

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.37	0.36	0.31	6.96	0.00	0.00	3,572	3,572	0.00	357	357	—	2,943	2,943	0.02	0.02	0.32	2,949
Vendor	0.01	0.01	0.19	0.08	< 0.005	< 0.005	63.5	63.5	< 0.005	6.35	6.35	—	173	173	< 0.005	0.02	< 0.005	180
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.06	1.27	0.00	0.00	652	652	0.00	65.1	65.1	—	487	487	< 0.005	< 0.005	0.05	488
Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	28.7	28.7	< 0.005	< 0.005	< 0.005	29.9
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.57. Architectural Coating (2048) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	1.94	2.89	0.01	0.01	—	0.01	0.01	—	0.01	—	401	401	0.02	< 0.005	—	402
Architectural Coatings	46.7	46.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.06	0.06	1.94	2.89	0.01	0.01	—	0.01	0.01	—	0.01	—	401	401	0.02	< 0.005	—	402
Architectural Coatings	46.7	46.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.05	1.39	2.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	287	287	0.01	< 0.005	—	288
Architectural Coatings	33.4	33.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.25	0.38	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	47.5	47.5	< 0.005	< 0.005	—	47.7
Architectural Coatings	6.10	6.10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.57	0.56	0.44	13.7	0.00	0.00	5,067	5,067	0.00	506	506	—	4,511	4,511	0.02	0.02	0.90	4,520

Vendor	0.01	0.01	0.25	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	241	241	< 0.005	0.03	< 0.005	251
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.49	0.48	0.44	7.50	0.00	0.00	5,067	5,067	0.00	506	506	—	3,832	3,832	0.02	0.02	0.02	3,840
Vendor	0.01	0.01	0.28	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	241	241	< 0.005	0.03	< 0.005	251
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.36	0.35	0.31	6.97	0.00	0.00	3,581	3,581	0.00	358	358	—	2,944	2,944	0.02	0.02	0.28	2,950
Vendor	0.01	0.01	0.19	0.08	< 0.005	< 0.005	63.7	63.7	< 0.005	6.37	6.37	—	173	173	< 0.005	0.02	< 0.005	180
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.06	1.27	0.00	0.00	654	654	0.00	65.3	65.3	—	487	487	< 0.005	< 0.005	0.05	488
Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	28.6	28.6	< 0.005	< 0.005	< 0.005	29.8
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.59. Architectural Coating (2049) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	1.94	2.89	0.01	0.01	—	0.01	0.01	—	0.01	—	401	401	0.02	< 0.005	—	402

Architectural Coatings	46.7	46.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	1.94	2.89	0.01	0.01	—	0.01	0.01	—	0.01	—	401	401	0.02	< 0.005	—	402
Architectural Coatings	46.7	46.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.05	1.38	2.06	< 0.005	0.01	—	0.01	0.01	—	0.01	—	286	286	0.01	< 0.005	—	287
Architectural Coatings	33.3	33.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.25	0.38	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	47.4	47.4	< 0.005	< 0.005	—	47.5

Architectural Coating	6.09	6.09	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.55	0.54	0.44	13.6	0.00	0.00	5,067	5,067	0.00	506	506	—	4,503	4,503	0.02	0.02	0.77	4,512
Vendor	0.01	0.01	0.25	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	240	240	< 0.005	0.03	< 0.005	250
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.48	0.48	0.44	7.50	0.00	0.00	5,067	5,067	0.00	506	506	—	3,825	3,825	0.02	0.02	0.02	3,833
Vendor	0.01	0.01	0.28	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	240	240	< 0.005	0.03	< 0.005	250
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.35	0.35	0.31	6.95	0.00	0.00	3,572	3,572	0.00	357	357	—	2,931	2,931	0.02	0.02	0.24	2,937
Vendor	0.01	0.01	0.19	0.08	< 0.005	< 0.005	63.5	63.5	< 0.005	6.35	6.35	—	171	171	< 0.005	0.02	< 0.005	179
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.06	1.27	0.00	0.00	652	652	0.00	65.1	65.1	—	485	485	< 0.005	< 0.005	0.04	486
Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	28.3	28.3	< 0.005	< 0.005	< 0.005	29.6
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Remove	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	1/1/2045	12/31/2049	5.00	1,305	—
Site Preparation	Site Preparation	1/1/2045	12/31/2049	5.00	1,305	—
Grading	Grading	1/1/2045	12/31/2049	5.00	1,305	—
Building Construction	Building Construction	1/1/2045	12/31/2049	5.00	1,305	—
Paving	Paving	1/1/2045	12/31/2049	5.00	1,305	—
Architectural Coating	Architectural Coating	1/1/2045	12/31/2049	5.00	1,305	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Rubber Tired Dozers	Diesel	Tier 4 Final	6.00	8.00	367	0.40
Demolition	Excavators	Diesel	Tier 4 Final	9.00	8.00	36.0	0.38
Demolition	Concrete/Industrial Saws	Diesel	Tier 4 Final	3.00	8.00	33.0	0.73
Site Preparation	Rubber Tired Dozers	Diesel	Tier 4 Final	9.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	12.0	8.00	84.0	0.37
Grading	Graders	Diesel	Tier 4 Final	3.00	8.00	148	0.41
Grading	Excavators	Diesel	Tier 4 Final	6.00	8.00	36.0	0.38

Grading	Tractors/Loaders/Back	Diesel	Tier 4 Final	6.00	8.00	84.0	0.37
Grading	Scrapers	Diesel	Tier 4 Final	6.00	8.00	423	0.48
Grading	Rubber Tired Dozers	Diesel	Tier 4 Final	3.00	8.00	367	0.40
Building Construction	Forklifts	Diesel	Tier 4 Final	9.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Tier 4 Final	3.00	8.00	25.0	0.74
Building Construction	Cranes	Diesel	Tier 4 Final	3.00	7.00	367	0.29
Building Construction	Welders	Diesel	Tier 4 Final	3.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Back hoes	Diesel	Tier 4 Final	9.00	7.00	84.0	0.37
Paving	Pavers	Diesel	Tier 4 Final	6.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Tier 4 Final	6.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Tier 4 Final	6.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Tier 4 Final	3.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	46.0	18.5	LDA,LDT1,LDT2
Demolition	Vendor	12.0	10.2	HHDT,MHDT
Demolition	Hauling	2.00	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	54.0	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	12.0	10.2	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—

Grading	Worker	60.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	12.0	10.2	HHDT,MHDT
Grading	Hauling	24.0	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	1,842	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	720	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	46.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	12.0	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	372	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	12.0	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Control Strategies Applied	PM10 Reduction	PM2.5 Reduction
Water unpaved roads twice daily	74%	74%
Limit vehicle speeds on unpaved roads to 25 mph	44%	44%
Sweep paved roads once per month	9%	9%

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00	0.00	6,569,501	2,189,834	—

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (Building Square Footage)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	50,000	—
Site Preparation	—	—	5,873	0.00	—
Grading	125,000	125,000	11,745	0.00	—
Paving	0.00	0.00	0.00	0.00	6,303

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	3	74%	74%
Water Demolished Area	2	36%	36%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
General Heavy Industry	3,977	100%
Manufacturing	1,144	100%
Manufacturing	276	100%
General Heavy Industry	905	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2045	0.00	457	0.03	< 0.005
2046	0.00	457	0.03	< 0.005
2047	0.00	457	0.03	< 0.005
2048	0.00	457	0.03	< 0.005
2049	0.00	457	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	—	annual days of extreme heat
Extreme Precipitation	—	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	—	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	11.6
AQ-PM	19.1

AQ-DPM	9.09
Drinking Water	30.6
Lead Risk Housing	50.8
Pesticides	90.5
Toxic Releases	7.58
Traffic	3.06
Effect Indicators	—
CleanUp Sites	74.2
Groundwater	77.9
Haz Waste Facilities/Generators	93.2
Impaired Water Bodies	100.0
Solid Waste	86.5
Sensitive Population	—
Asthma	87.6
Cardio-vascular	83.2
Low Birth Weights	26.9
Socioeconomic Factor Indicators	—
Education	82.7
Housing	51.4
Linguistic	88.8
Poverty	94.9
Unemployment	99.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	16.66880534

Employed	7.173104068
Median HI	5.299627871
Education	—
Bachelor's or higher	5.017323239
High school enrollment	16.8741178
Preschool enrollment	68.89516233
Transportation	—
Auto Access	18.40112922
Active commuting	51.10997049
Social	—
2-parent households	13.28114975
Voting	16.79712563
Neighborhood	—
Alcohol availability	70.25535737
Park access	33.85089183
Retail density	4.311561658
Supermarket access	49.58295907
Tree canopy	0.782753753
Housing	—
Homeownership	38.3036058
Housing habitability	30.96368536
Low-inc homeowner severe housing cost burden	26.76761196
Low-inc renter severe housing cost burden	52.89362248
Uncrowded housing	38.58591043
Health Outcomes	—
Insured adults	21.00603105
Arthritis	0.0
Asthma ER Admissions	30.1

High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	41.7
Cognitively Disabled	50.3
Physically Disabled	19.5
Heart Attack ER Admissions	46.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	54.3
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	14.1
Elderly	42.0
English Speaking	18.7
Foreign-born	65.3
Outdoor Workers	5.4

Climate Change Adaptive Capacity	—
Impervious Surface Cover	85.8
Traffic Density	4.9
Traffic Access	23.0
Other Indices	—
Hardship	92.9
Other Decision Support	—
2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	82.0
Healthy Places Index Score for Project Location (b)	11.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification

Construction: Construction Phases	Land use data are based applicant-provided buildout assumptions. Phase 3 (2045-2049) represents 50% of 10-year buildout.
Construction: Off-Road Equipment	Equipment increased based on scaler per buildout methodology.
Construction: Trips and VMT	Trips increased based on scaler per buildout methodology.
Construction: On-Road Fugitive Dust	All roads used by future developments projects within the Specific Plan Area would be required to be paved. Per ICAPCD guidance a value of 85% paved is assumed in the modeling to account for the high levels of entrained dust generated from vehicle travel on paved roadways in the region. PM reductions altered based on dust control plan implementation strategies (watering unpaved roads three times per day).
Construction: Paving	Paved area acreages calculated based on buildout estimates. Conservatively assumed 100% asphalt.

Lithium Valley SP Construction - Phase 3 (2050-2054) Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Lithium Valley SP Construction - Phase 3 (2050-2054)
Construction Start Date	1/1/2050
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	4.80
Location	33.18829759139308, -115.6026869228474
County	Imperial
City	Unincorporated
Air District	Imperial County APCD
Air Basin	Salton Sea
TAZ	5600
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
General Heavy Industry	2,436	1000sqft	55.9	2,436,265	243,627	—	—	—
Manufacturing	1,420	1000sqft	32.6	1,420,275	142,027	—	—	—

Manufacturing	413	1000sqft	9.49	413,302	41,330	—	—	—
General Heavy Industry	110	1000sqft	2.52	109,825	10,977	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	70.7	69.6	72.2	425	0.73	1.48	39,227	39,228	1.30	3,926	3,927	—	105,220	105,220	2.60	3.26	10.3	106,268
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	69.3	69.1	73.8	385	0.73	1.48	39,227	39,228	1.30	3,926	3,927	—	100,783	100,783	2.65	3.26	0.27	101,823
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	49.6	49.4	52.4	285	0.53	1.06	27,727	27,728	0.93	2,775	2,776	—	73,286	73,286	1.86	2.33	3.17	74,031
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	9.05	9.02	9.57	52.0	0.10	0.19	5,060	5,060	0.17	506	507	—	12,133	12,133	0.31	0.39	0.52	12,257

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2045	70.7	69.6	72.2	425	0.73	1.48	39,227	39,228	1.30	3,926	3,927	—	105,220	105,220	2.60	3.26	10.3	106,268
2046	70.7	69.5	72.0	425	0.73	1.48	39,227	39,228	1.30	3,926	3,927	—	104,997	104,997	2.60	3.26	8.66	106,044
2047	70.6	69.5	71.9	424	0.73	1.48	39,227	39,228	1.30	3,926	3,927	—	104,803	104,803	2.60	3.09	7.29	105,795
2048	69.6	69.5	71.9	424	0.73	1.48	39,227	39,228	1.30	3,926	3,927	—	104,640	104,640	2.60	3.09	6.22	105,632
2049	69.5	69.4	71.9	423	0.73	1.48	39,227	39,228	1.30	3,926	3,927	—	104,510	104,510	2.60	3.09	5.32	105,501
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2045	69.3	69.1	73.8	385	0.73	1.48	39,227	39,228	1.30	3,926	3,927	—	100,783	100,783	2.65	3.26	0.27	101,823
2046	69.1	69.0	73.8	385	0.73	1.48	39,227	39,228	1.30	3,926	3,927	—	100,577	100,577	2.65	3.26	0.22	101,616
2047	69.1	69.0	73.8	385	0.73	1.48	39,227	39,228	1.30	3,926	3,927	—	100,396	100,396	2.65	3.09	0.19	101,383
2048	69.1	68.9	73.6	384	0.73	1.48	39,227	39,228	1.30	3,926	3,927	—	100,246	100,246	2.60	3.09	0.16	101,231
2049	69.0	68.9	73.6	384	0.73	1.48	39,227	39,228	1.30	3,926	3,927	—	100,122	100,122	2.58	3.09	0.14	101,107
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2045	49.6	49.4	52.4	285	0.52	1.05	27,651	27,652	0.93	2,767	2,768	—	73,286	73,286	1.85	2.33	3.17	74,031
2046	49.5	49.4	52.3	284	0.52	1.05	27,651	27,652	0.93	2,767	2,768	—	73,135	73,135	1.85	2.33	2.68	73,879
2047	49.5	49.4	52.2	284	0.52	1.05	27,651	27,652	0.93	2,767	2,768	—	73,001	73,001	1.85	2.21	2.25	73,708
2048	49.5	49.4	52.4	285	0.53	1.06	27,727	27,728	0.93	2,775	2,776	—	73,090	73,090	1.86	2.21	1.92	73,798
2049	49.4	49.3	52.2	284	0.52	1.05	27,651	27,652	0.93	2,767	2,768	—	72,800	72,800	1.85	2.21	1.65	73,506
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2045	9.05	9.02	9.57	52.0	0.10	0.19	5,046	5,046	0.17	505	505	—	12,133	12,133	0.31	0.39	0.52	12,257
2046	9.04	9.02	9.54	51.9	0.10	0.19	5,046	5,046	0.17	505	505	—	12,108	12,108	0.31	0.39	0.44	12,231
2047	9.03	9.01	9.54	51.9	0.10	0.19	5,046	5,046	0.17	505	505	—	12,086	12,086	0.31	0.37	0.37	12,203
2048	9.04	9.01	9.56	52.0	0.10	0.19	5,060	5,060	0.17	506	507	—	12,101	12,101	0.31	0.37	0.32	12,218
2049	9.01	8.99	9.53	51.9	0.10	0.19	5,046	5,046	0.17	505	505	—	12,053	12,053	0.31	0.37	0.27	12,170

3. Construction Emissions Details

3.1. Demolition (2045) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.09	1.09	13.5	54.5	0.10	0.19	—	0.19	0.19	—	0.19	—	10,278	10,278	0.42	0.08	—	10,313
Demolition	—	—	—	—	—	—	0.03	0.03	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.09	1.09	13.5	54.5	0.10	0.19	—	0.19	0.19	—	0.19	—	10,278	10,278	0.42	0.08	—	10,313
Demolition	—	—	—	—	—	—	0.03	0.03	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.78	0.78	9.65	38.9	0.07	0.14	—	0.14	0.14	—	0.14	—	7,341	7,341	0.30	0.06	—	7,366

Demoliti	—	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.14	1.76	7.11	0.01	0.02	—	0.02	0.02	—	0.02	—	1,215	1,215	0.05	0.01	—	1,220
Demolition	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.07	0.06	1.72	0.00	0.00	627	627	0.00	62.6	62.6	—	563	563	< 0.005	< 0.005	0.18	564
Vendor	0.01	0.01	0.26	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	246	246	< 0.005	0.04	0.01	257
Hauling	< 0.005	< 0.005	0.12	0.03	< 0.005	< 0.005	29.5	29.5	< 0.005	2.94	2.95	—	102	102	< 0.005	0.02	0.03	107
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.06	0.95	0.00	0.00	627	627	0.00	62.6	62.6	—	478	478	< 0.005	< 0.005	< 0.005	479
Vendor	0.01	0.01	0.28	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	246	246	< 0.005	0.04	< 0.005	257
Hauling	< 0.005	< 0.005	0.13	0.03	< 0.005	< 0.005	29.5	29.5	< 0.005	2.94	2.95	—	102	102	< 0.005	0.02	< 0.005	107
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.04	0.88	0.00	0.00	442	442	0.00	44.1	44.1	—	366	366	< 0.005	< 0.005	0.05	367
Vendor	0.01	0.01	0.20	0.08	< 0.005	< 0.005	63.5	63.5	< 0.005	6.35	6.35	—	176	176	< 0.005	0.03	< 0.005	184
Hauling	< 0.005	< 0.005	0.09	0.02	< 0.005	< 0.005	20.8	20.8	< 0.005	2.08	2.08	—	72.8	72.8	< 0.005	0.01	0.01	76.4
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.16	0.00	0.00	80.6	80.6	0.00	8.05	8.05	—	60.6	60.6	< 0.005	< 0.005	0.01	60.7

Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	29.1	29.1	< 0.005	< 0.005	< 0.005	30.4
Hauling	< 0.005	< 0.005	0.02	< 0.005	< 0.005	< 0.005	3.79	3.79	< 0.005	0.38	0.38	—	12.1	12.1	< 0.005	< 0.005	< 0.005	12.6

3.3. Demolition (2046) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.09	1.09	13.5	54.5	0.10	0.19	—	0.19	0.19	—	0.19	—	10,278	10,278	0.42	0.08	—	10,314
Demolition	—	—	—	—	—	—	0.03	0.03	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.09	1.09	13.5	54.5	0.10	0.19	—	0.19	0.19	—	0.19	—	10,278	10,278	0.42	0.08	—	10,314
Demolition	—	—	—	—	—	—	0.03	0.03	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.78	0.78	9.65	38.9	0.07	0.14	—	0.14	0.14	—	0.14	—	7,342	7,342	0.30	0.06	—	7,367

Demoliti	—	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.14	1.76	7.11	0.01	0.02	—	0.02	0.02	—	0.02	—	1,215	1,215	0.05	0.01	—	1,220
Demolition	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.07	0.05	1.72	0.00	0.00	627	627	0.00	62.6	62.6	—	561	561	< 0.005	< 0.005	0.15	562
Vendor	0.01	0.01	0.25	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	244	244	< 0.005	0.04	0.01	255
Hauling	< 0.005	< 0.005	0.12	0.03	< 0.005	< 0.005	29.5	29.5	< 0.005	2.94	2.95	—	102	102	< 0.005	0.02	0.03	107
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.05	0.95	0.00	0.00	627	627	0.00	62.6	62.6	—	476	476	< 0.005	< 0.005	< 0.005	477
Vendor	0.01	0.01	0.28	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	244	244	< 0.005	0.04	< 0.005	255
Hauling	< 0.005	< 0.005	0.13	0.03	< 0.005	< 0.005	29.5	29.5	< 0.005	2.94	2.95	—	102	102	< 0.005	0.02	< 0.005	107
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.04	0.86	0.00	0.00	442	442	0.00	44.1	44.1	—	365	365	< 0.005	< 0.005	0.05	366
Vendor	0.01	0.01	0.19	0.08	< 0.005	< 0.005	63.5	63.5	< 0.005	6.35	6.35	—	174	174	< 0.005	0.03	< 0.005	182
Hauling	< 0.005	< 0.005	0.09	0.02	< 0.005	< 0.005	20.8	20.8	< 0.005	2.08	2.08	—	72.7	72.7	< 0.005	0.01	0.01	76.2
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.16	0.00	0.00	80.6	80.6	0.00	8.05	8.05	—	60.4	60.4	< 0.005	< 0.005	0.01	60.5

Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	28.9	28.9	< 0.005	< 0.005	< 0.005	30.2
Hauling	< 0.005	< 0.005	0.02	< 0.005	< 0.005	< 0.005	3.79	3.79	< 0.005	0.38	0.38	—	12.0	12.0	< 0.005	< 0.005	< 0.005	12.6

3.5. Demolition (2047) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.09	1.09	13.5	54.5	0.10	0.19	—	0.19	0.19	—	0.19	—	10,278	10,278	0.42	0.08	—	10,314
Demolition	—	—	—	—	—	—	0.03	0.03	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.09	1.09	13.5	54.5	0.10	0.19	—	0.19	0.19	—	0.19	—	10,278	10,278	0.42	0.08	—	10,314
Demolition	—	—	—	—	—	—	0.03	0.03	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.78	0.78	9.65	38.9	0.07	0.14	—	0.14	0.14	—	0.14	—	7,342	7,342	0.30	0.06	—	7,367

Demoliti	—	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.14	1.76	7.11	0.01	0.02	—	0.02	0.02	—	0.02	—	1,215	1,215	0.05	0.01	—	1,220
Demolition	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.07	0.05	1.70	0.00	0.00	627	627	0.00	62.6	62.6	—	559	559	< 0.005	< 0.005	0.13	560
Vendor	0.01	0.01	0.25	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	242	242	< 0.005	0.03	< 0.005	253
Hauling	< 0.005	< 0.005	0.12	0.03	< 0.005	< 0.005	29.5	29.5	< 0.005	2.94	2.95	—	102	102	< 0.005	0.02	0.02	107
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.05	0.95	0.00	0.00	627	627	0.00	62.6	62.6	—	475	475	< 0.005	< 0.005	< 0.005	476
Vendor	0.01	0.01	0.28	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	243	243	< 0.005	0.03	< 0.005	253
Hauling	< 0.005	< 0.005	0.13	0.03	< 0.005	< 0.005	29.5	29.5	< 0.005	2.94	2.95	—	102	102	< 0.005	0.02	< 0.005	107
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.04	0.86	0.00	0.00	442	442	0.00	44.1	44.1	—	364	364	< 0.005	< 0.005	0.04	365
Vendor	0.01	0.01	0.19	0.08	< 0.005	< 0.005	63.5	63.5	< 0.005	6.35	6.35	—	173	173	< 0.005	0.02	< 0.005	180
Hauling	< 0.005	< 0.005	0.09	0.02	< 0.005	< 0.005	20.8	20.8	< 0.005	2.08	2.08	—	72.6	72.6	< 0.005	0.01	0.01	76.2
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.16	0.00	0.00	80.6	80.6	0.00	8.05	8.05	—	60.2	60.2	< 0.005	< 0.005	0.01	60.4

Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	28.7	28.7	< 0.005	< 0.005	< 0.005	29.9
Hauling	< 0.005	< 0.005	0.02	< 0.005	< 0.005	< 0.005	3.79	3.79	< 0.005	0.38	0.38	—	12.0	12.0	< 0.005	< 0.005	< 0.005	12.6

3.7. Demolition (2048) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.09	1.09	13.5	54.5	0.10	0.19	—	0.19	0.19	—	0.19	—	10,278	10,278	0.42	0.08	—	10,313
Demolition	—	—	—	—	—	—	0.03	0.03	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.09	1.09	13.5	54.5	0.10	0.19	—	0.19	0.19	—	0.19	—	10,278	10,278	0.42	0.08	—	10,313
Demolition	—	—	—	—	—	—	0.03	0.03	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.78	0.78	9.68	39.0	0.07	0.14	—	0.14	0.14	—	0.14	—	7,361	7,361	0.30	0.06	—	7,386

Demoliti	—	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.14	1.77	7.13	0.01	0.02	—	0.02	0.02	—	0.02	—	1,219	1,219	0.05	0.01	—	1,223
Demolition	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.05	1.70	0.00	0.00	627	627	0.00	62.6	62.6	—	558	558	< 0.005	< 0.005	0.11	559
Vendor	0.01	0.01	0.25	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	241	241	< 0.005	0.03	< 0.005	251
Hauling	< 0.005	< 0.005	0.12	0.03	< 0.005	< 0.005	29.5	29.5	< 0.005	2.94	2.95	—	102	102	< 0.005	0.02	0.02	106
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.05	0.93	0.00	0.00	627	627	0.00	62.6	62.6	—	474	474	< 0.005	< 0.005	< 0.005	475
Vendor	0.01	0.01	0.28	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	241	241	< 0.005	0.03	< 0.005	251
Hauling	< 0.005	< 0.005	0.13	0.03	< 0.005	< 0.005	29.5	29.5	< 0.005	2.94	2.95	—	102	102	< 0.005	0.02	< 0.005	107
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.04	0.86	0.00	0.00	443	443	0.00	44.2	44.2	—	364	364	< 0.005	< 0.005	0.03	365
Vendor	0.01	0.01	0.19	0.08	< 0.005	< 0.005	63.7	63.7	< 0.005	6.37	6.37	—	173	173	< 0.005	0.02	< 0.005	180
Hauling	< 0.005	< 0.005	0.09	0.02	< 0.005	< 0.005	20.8	20.8	< 0.005	2.08	2.08	—	72.8	72.8	< 0.005	0.01	0.01	76.3
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.16	0.00	0.00	80.8	80.8	0.00	8.07	8.07	—	60.3	60.3	< 0.005	< 0.005	0.01	60.4

Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	28.6	28.6	< 0.005	< 0.005	< 0.005	29.8
Hauling	< 0.005	< 0.005	0.02	< 0.005	< 0.005	< 0.005	3.80	3.80	< 0.005	0.38	0.38	—	12.0	12.0	< 0.005	< 0.005	< 0.005	12.6

3.9. Demolition (2049) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.09	1.09	13.5	54.5	0.10	0.19	—	0.19	0.19	—	0.19	—	10,278	10,278	0.42	0.08	—	10,314
Demolition	—	—	—	—	—	—	0.03	0.03	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.09	1.09	13.5	54.5	0.10	0.19	—	0.19	0.19	—	0.19	—	10,278	10,278	0.42	0.08	—	10,314
Demolition	—	—	—	—	—	—	0.03	0.03	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.78	0.78	9.65	38.9	0.07	0.14	—	0.14	0.14	—	0.14	—	7,342	7,342	0.30	0.06	—	7,367

Demoliti	—	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.14	1.76	7.11	0.01	0.02	—	0.02	0.02	—	0.02	—	1,215	1,215	0.05	0.01	—	1,220
Demolition	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.05	1.68	0.00	0.00	627	627	0.00	62.6	62.6	—	557	557	< 0.005	< 0.005	0.10	558
Vendor	0.01	0.01	0.25	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	240	240	< 0.005	0.03	< 0.005	250
Hauling	< 0.005	< 0.005	0.12	0.03	< 0.005	< 0.005	29.5	29.5	< 0.005	2.94	2.95	—	101	101	< 0.005	0.02	0.02	106
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.05	0.93	0.00	0.00	627	627	0.00	62.6	62.6	—	473	473	< 0.005	< 0.005	< 0.005	474
Vendor	0.01	0.01	0.28	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	240	240	< 0.005	0.03	< 0.005	250
Hauling	< 0.005	< 0.005	0.13	0.03	< 0.005	< 0.005	29.5	29.5	< 0.005	2.94	2.95	—	102	102	< 0.005	0.02	< 0.005	106
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.04	0.86	0.00	0.00	442	442	0.00	44.1	44.1	—	362	362	< 0.005	< 0.005	0.03	363
Vendor	0.01	0.01	0.19	0.08	< 0.005	< 0.005	63.5	63.5	< 0.005	6.35	6.35	—	171	171	< 0.005	0.02	< 0.005	179
Hauling	< 0.005	< 0.005	0.09	0.02	< 0.005	< 0.005	20.8	20.8	< 0.005	2.08	2.08	—	72.5	72.5	< 0.005	0.01	0.01	76.0
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.16	0.00	0.00	80.6	80.6	0.00	8.05	8.05	—	60.0	60.0	< 0.005	< 0.005	< 0.005	60.1

Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	28.3	28.3	< 0.005	< 0.005	< 0.005	29.6
Hauling	< 0.005	< 0.005	0.02	< 0.005	< 0.005	< 0.005	3.79	3.79	< 0.005	0.38	0.38	—	12.0	12.0	< 0.005	< 0.005	< 0.005	12.6

3.11. Site Preparation (2045) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.49	1.49	7.77	84.9	0.15	0.30	—	0.30	0.30	—	0.30	—	15,887	15,887	0.64	0.13	—	15,942
Dust From Material Movement	—	—	—	—	—	—	15.3	15.3	—	7.88	7.88	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.49	1.49	7.77	84.9	0.15	0.30	—	0.30	0.30	—	0.30	—	15,887	15,887	0.64	0.13	—	15,942
Dust From Material Movement	—	—	—	—	—	—	15.3	15.3	—	7.88	7.88	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	1.07	1.07	5.55	60.7	0.10	0.21	—	0.21	0.21	—	0.21	—	11,348	11,348	0.46	0.09	—	11,387
Dust From Material Movement	—	—	—	—	—	—	11.0	11.0	—	5.63	5.63	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.19	0.19	1.01	11.1	0.02	0.04	—	0.04	0.04	—	0.04	—	1,879	1,879	0.08	0.02	—	1,885
Dust From Material Movement	—	—	—	—	—	—	2.00	2.00	—	1.03	1.03	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.08	0.07	2.02	0.00	0.00	736	736	0.00	73.4	73.4	—	660	660	< 0.005	< 0.005	0.21	662
Vendor	0.01	0.01	0.26	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	246	246	< 0.005	0.04	0.01	257
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.07	1.12	0.00	0.00	736	736	0.00	73.4	73.4	—	561	561	< 0.005	< 0.005	0.01	562
Vendor	0.01	0.01	0.28	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	246	246	< 0.005	0.04	< 0.005	257
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.05	1.03	0.00	0.00	518	518	0.00	51.8	51.8	—	430	430	< 0.005	< 0.005	0.06	431

Vendor	0.01	0.01	0.20	0.08	< 0.005	< 0.005	63.5	63.5	< 0.005	6.35	6.35	—	176	176	< 0.005	0.03	< 0.005	184
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.19	0.00	0.00	94.6	94.6	0.00	9.45	9.45	—	71.2	71.2	< 0.005	< 0.005	0.01	71.3
Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	29.1	29.1	< 0.005	< 0.005	< 0.005	30.4
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Site Preparation (2046) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.49	1.49	7.77	84.9	0.15	0.30	—	0.30	0.30	—	0.30	—	15,888	15,888	0.64	0.13	—	15,943
Dust From Material Movement	—	—	—	—	—	—	15.3	15.3	—	7.88	7.88	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.49	1.49	7.77	84.9	0.15	0.30	—	0.30	0.30	—	0.30	—	15,888	15,888	0.64	0.13	—	15,943

Dust From Material Movement	—	—	—	—	—	—	15.3	15.3	—	7.88	7.88	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.07	1.07	5.55	60.7	0.10	0.21	—	0.21	0.21	—	0.21	—	11,349	11,349	0.46	0.09	—	11,388
Dust From Material Movement	—	—	—	—	—	—	11.0	11.0	—	5.63	5.63	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.19	0.19	1.01	11.1	0.02	0.04	—	0.04	0.04	—	0.04	—	1,879	1,879	0.08	0.02	—	1,885
Dust From Material Movement	—	—	—	—	—	—	2.00	2.00	—	1.03	1.03	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.08	0.06	2.02	0.00	0.00	736	736	0.00	73.4	73.4	—	658	658	< 0.005	< 0.005	0.18	660
Vendor	0.01	0.01	0.25	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	244	244	< 0.005	0.04	0.01	255
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.06	1.12	0.00	0.00	736	736	0.00	73.4	73.4	—	559	559	< 0.005	< 0.005	< 0.005	560
Vendor	0.01	0.01	0.28	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	244	244	< 0.005	0.04	< 0.005	255
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.05	1.01	0.00	0.00	518	518	0.00	51.8	51.8	—	428	428	< 0.005	< 0.005	0.06	429
Vendor	0.01	0.01	0.19	0.08	< 0.005	< 0.005	63.5	63.5	< 0.005	6.35	6.35	—	174	174	< 0.005	0.03	< 0.005	182
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.18	0.00	0.00	94.6	94.6	0.00	9.45	9.45	—	70.9	70.9	< 0.005	< 0.005	0.01	71.1
Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	28.9	28.9	< 0.005	< 0.005	< 0.005	30.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.15. Site Preparation (2047) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.49	1.49	7.77	84.9	0.15	0.30	—	0.30	0.30	—	0.30	—	15,888	15,888	0.64	0.13	—	15,943
Dust From Material Movement	—	—	—	—	—	—	15.3	15.3	—	7.88	7.88	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.49	1.49	7.77	84.9	0.15	0.30	—	0.30	0.30	—	0.30	—	15,888	15,888	0.64	0.13	—	15,943
Dust From Material Movement	—	—	—	—	—	—	15.3	15.3	—	7.88	7.88	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.07	1.07	5.55	60.7	0.10	0.21	—	0.21	0.21	—	0.21	—	11,349	11,349	0.46	0.09	—	11,388
Dust From Material Movement	—	—	—	—	—	—	11.0	11.0	—	5.63	5.63	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.19	0.19	1.01	11.1	0.02	0.04	—	0.04	0.04	—	0.04	—	1,879	1,879	0.08	0.02	—	1,885
Dust From Material Movement	—	—	—	—	—	—	2.00	2.00	—	1.03	1.03	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.08	0.06	2.00	0.00	0.00	736	736	0.00	73.4	73.4	—	656	656	< 0.005	< 0.005	0.15	658
Vendor	0.01	0.01	0.25	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	242	242	< 0.005	0.03	< 0.005	253
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.06	1.11	0.00	0.00	736	736	0.00	73.4	73.4	—	557	557	< 0.005	< 0.005	< 0.005	559
Vendor	0.01	0.01	0.28	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	243	243	< 0.005	0.03	< 0.005	253
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.05	1.01	0.00	0.00	518	518	0.00	51.8	51.8	—	427	427	< 0.005	< 0.005	0.05	428
Vendor	0.01	0.01	0.19	0.08	< 0.005	< 0.005	63.5	63.5	< 0.005	6.35	6.35	—	173	173	< 0.005	0.02	< 0.005	180
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.18	0.00	0.00	94.6	94.6	0.00	9.45	9.45	—	70.7	70.7	< 0.005	< 0.005	0.01	70.9
Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	28.7	28.7	< 0.005	< 0.005	< 0.005	29.9
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.17. Site Preparation (2048) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	1.49	1.49	7.77	84.9	0.15	0.30	—	0.30	0.30	—	0.30	—	15,887	15,887	0.64	0.13	—	15,942
Dust From Material Movement	—	—	—	—	—	—	15.3	15.3	—	7.88	7.88	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.49	1.49	7.77	84.9	0.15	0.30	—	0.30	0.30	—	0.30	—	15,887	15,887	0.64	0.13	—	15,942
Dust From Material Movement	—	—	—	—	—	—	15.3	15.3	—	7.88	7.88	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.07	1.07	5.56	60.8	0.11	0.21	—	0.21	0.21	—	0.21	—	11,379	11,379	0.46	0.09	—	11,418
Dust From Material Movement	—	—	—	—	—	—	11.0	11.0	—	5.64	5.64	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.20	0.20	1.02	11.1	0.02	0.04	—	0.04	0.04	—	0.04	—	1,884	1,884	0.08	0.02	—	1,890

Dust From Material Movement	—	—	—	—	—	—	2.00	2.00	—	1.03	1.03	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.06	2.00	0.00	0.00	736	736	0.00	73.4	73.4	—	655	655	< 0.005	< 0.005	0.13	656
Vendor	0.01	0.01	0.25	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	241	241	< 0.005	0.03	< 0.005	251
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.06	1.09	0.00	0.00	736	736	0.00	73.4	73.4	—	556	556	< 0.005	< 0.005	< 0.005	557
Vendor	0.01	0.01	0.28	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	241	241	< 0.005	0.03	< 0.005	251
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.05	1.01	0.00	0.00	520	520	0.00	51.9	51.9	—	427	427	< 0.005	< 0.005	0.04	428
Vendor	0.01	0.01	0.19	0.08	< 0.005	< 0.005	63.7	63.7	< 0.005	6.37	6.37	—	173	173	< 0.005	0.02	< 0.005	180
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.18	0.00	0.00	94.9	94.9	0.00	9.47	9.47	—	70.8	70.8	< 0.005	< 0.005	0.01	70.9
Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	28.6	28.6	< 0.005	< 0.005	< 0.005	29.8
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.19. Site Preparation (2049) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.49	1.49	7.77	84.9	0.15	0.30	—	0.30	0.30	—	0.30	—	15,888	15,888	0.64	0.13	—	15,943
Dust From Material Movement	—	—	—	—	—	—	15.3	15.3	—	7.88	7.88	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.49	1.49	7.77	84.9	0.15	0.30	—	0.30	0.30	—	0.30	—	15,888	15,888	0.64	0.13	—	15,943
Dust From Material Movement	—	—	—	—	—	—	15.3	15.3	—	7.88	7.88	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.07	1.07	5.55	60.7	0.10	0.21	—	0.21	0.21	—	0.21	—	11,349	11,349	0.46	0.09	—	11,388
Dust From Material Movement	—	—	—	—	—	—	11.0	11.0	—	5.63	5.63	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.19	0.19	1.01	11.1	0.02	0.04	—	0.04	0.04	—	0.04	—	1,879	1,879	0.08	0.02	—	1,885
Dust From Material Movement	—	—	—	—	—	—	2.00	2.00	—	1.03	1.03	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.06	1.97	0.00	0.00	736	736	0.00	73.4	73.4	—	654	654	< 0.005	< 0.005	0.11	655
Vendor	0.01	0.01	0.25	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	240	240	< 0.005	0.03	< 0.005	250
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.06	1.09	0.00	0.00	736	736	0.00	73.4	73.4	—	555	555	< 0.005	< 0.005	< 0.005	556
Vendor	0.01	0.01	0.28	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	240	240	< 0.005	0.03	< 0.005	250
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.05	1.01	0.00	0.00	518	518	0.00	51.8	51.8	—	425	425	< 0.005	< 0.005	0.03	426
Vendor	0.01	0.01	0.19	0.08	< 0.005	< 0.005	63.5	63.5	< 0.005	6.35	6.35	—	171	171	< 0.005	0.02	< 0.005	179
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.18	0.00	0.00	94.6	94.6	0.00	9.45	9.45	—	70.4	70.4	< 0.005	< 0.005	0.01	70.6

Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	28.3	28.3	< 0.005	< 0.005	< 0.005	29.6
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.21. Grading (2045) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.92	1.92	13.3	106	0.18	0.37	—	0.37	0.37	—	0.37	—	19,788	19,788	0.80	0.16	—	19,856
Dust From Material Movement	—	—	—	—	—	—	7.18	7.18	—	2.85	2.85	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.92	1.92	13.3	106	0.18	0.37	—	0.37	0.37	—	0.37	—	19,788	19,788	0.80	0.16	—	19,856
Dust From Material Movement	—	—	—	—	—	—	7.18	7.18	—	2.85	2.85	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	1.37	1.37	9.48	75.7	0.13	0.27	—	0.27	0.27	—	0.27	—	14,134	14,134	0.57	0.11	—	14,183
Dust From Material Movement	—	—	—	—	—	—	5.13	5.13	—	2.04	2.04	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.25	0.25	1.73	13.8	0.02	0.05	—	0.05	0.05	—	0.05	—	2,340	2,340	0.09	0.02	—	2,348
Dust From Material Movement	—	—	—	—	—	—	0.94	0.94	—	0.37	0.37	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.09	0.07	2.25	0.00	0.00	817	817	0.00	81.6	81.6	—	734	734	< 0.005	< 0.005	0.23	735
Vendor	0.01	0.01	0.26	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	246	246	< 0.005	0.04	0.01	257
Hauling	0.05	0.03	1.40	0.38	0.01	0.03	354	354	0.03	35.3	35.4	—	1,223	1,223	< 0.005	0.20	0.36	1,283
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.07	1.24	0.00	0.00	817	817	0.00	81.6	81.6	—	623	623	0.01	< 0.005	0.01	624
Vendor	0.01	0.01	0.28	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	246	246	< 0.005	0.04	< 0.005	257
Hauling	0.05	0.03	1.54	0.39	0.01	0.03	354	354	0.03	35.3	35.4	—	1,225	1,225	< 0.005	0.20	0.01	1,284
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.05	1.14	0.00	0.00	576	576	0.00	57.5	57.5	—	478	478	< 0.005	< 0.005	0.07	479

Vendor	0.01	0.01	0.20	0.08	< 0.005	< 0.005	63.5	63.5	< 0.005	6.35	6.35	—	176	176	< 0.005	0.03	< 0.005	184
Hauling	0.03	0.02	1.08	0.27	0.01	0.02	249	249	0.02	24.9	24.9	—	874	874	< 0.005	0.14	0.11	916
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.21	0.00	0.00	105	105	0.00	10.5	10.5	—	79.1	79.1	< 0.005	< 0.005	0.01	79.2
Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	29.1	29.1	< 0.005	< 0.005	< 0.005	30.4
Hauling	0.01	< 0.005	0.20	0.05	< 0.005	< 0.005	45.5	45.5	< 0.005	4.55	4.55	—	145	145	< 0.005	0.02	0.02	152

3.23. Grading (2046) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.92	1.92	13.3	106	0.18	0.37	—	0.37	0.37	—	0.37	—	19,788	19,788	0.80	0.16	—	19,856
Dust From Material Movement	—	—	—	—	—	—	7.18	7.18	—	2.85	2.85	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.92	1.92	13.3	106	0.18	0.37	—	0.37	0.37	—	0.37	—	19,788	19,788	0.80	0.16	—	19,856

Dust From Material Movement	—	—	—	—	—	—	7.18	7.18	—	2.85	2.85	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.37	1.37	9.48	75.7	0.13	0.27	—	0.27	0.27	—	0.27	—	14,135	14,135	0.57	0.11	—	14,183
Dust From Material Movement	—	—	—	—	—	—	5.13	5.13	—	2.04	2.04	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.25	0.25	1.73	13.8	0.02	0.05	—	0.05	0.05	—	0.05	—	2,340	2,340	0.09	0.02	—	2,348
Dust From Material Movement	—	—	—	—	—	—	0.94	0.94	—	0.37	0.37	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.09	0.07	2.25	0.00	0.00	817	817	0.00	81.6	81.6	—	731	731	< 0.005	< 0.005	0.20	733
Vendor	0.01	0.01	0.25	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	244	244	< 0.005	0.04	0.01	255
Hauling	0.05	0.03	1.39	0.38	0.01	0.03	354	354	0.03	35.3	35.4	—	1,221	1,221	< 0.005	0.20	0.31	1,281

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.07	1.24	0.00	0.00	817	817	0.00	81.6	81.6	—	621	621	0.01	< 0.005	0.01	622
Vendor	0.01	0.01	0.28	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	244	244	< 0.005	0.04	< 0.005	255
Hauling	0.05	0.03	1.54	0.39	0.01	0.03	354	354	0.03	35.3	35.4	—	1,223	1,223	< 0.005	0.20	0.01	1,282
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.05	1.12	0.00	0.00	576	576	0.00	57.5	57.5	—	476	476	< 0.005	< 0.005	0.06	477
Vendor	0.01	0.01	0.19	0.08	< 0.005	< 0.005	63.5	63.5	< 0.005	6.35	6.35	—	174	174	< 0.005	0.03	< 0.005	182
Hauling	0.03	0.02	1.08	0.27	0.01	0.02	249	249	0.02	24.9	24.9	—	873	873	< 0.005	0.14	0.10	915
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.21	0.00	0.00	105	105	0.00	10.5	10.5	—	78.8	78.8	< 0.005	< 0.005	0.01	79.0
Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	28.9	28.9	< 0.005	< 0.005	< 0.005	30.2
Hauling	0.01	< 0.005	0.20	0.05	< 0.005	< 0.005	45.5	45.5	< 0.005	4.55	4.55	—	145	145	< 0.005	0.02	0.02	151

3.25. Grading (2047) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.92	1.92	13.3	106	0.18	0.37	—	0.37	0.37	—	0.37	—	19,788	19,788	0.80	0.16	—	19,856
Dust From Material Movement	—	—	—	—	—	—	7.18	7.18	—	2.85	2.85	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.92	1.92	13.3	106	0.18	0.37	—	0.37	0.37	—	0.37	—	19,788	19,788	0.80	0.16	—	19,856
Dust From Material Movement	—	—	—	—	—	—	7.18	7.18	—	2.85	2.85	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.37	1.37	9.48	75.7	0.13	0.27	—	0.27	0.27	—	0.27	—	14,135	14,135	0.57	0.11	—	14,183
Dust From Material Movement	—	—	—	—	—	—	5.13	5.13	—	2.04	2.04	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.25	0.25	1.73	13.8	0.02	0.05	—	0.05	0.05	—	0.05	—	2,340	2,340	0.09	0.02	—	2,348
Dust From Material Movement	—	—	—	—	—	—	0.94	0.94	—	0.37	0.37	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.09	0.07	2.22	0.00	0.00	817	817	0.00	81.6	81.6	—	729	729	< 0.005	< 0.005	0.17	731
Vendor	0.01	0.01	0.25	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	242	242	< 0.005	0.03	< 0.005	253
Hauling	0.04	0.03	1.39	0.38	0.01	0.03	354	354	0.03	35.3	35.4	—	1,220	1,220	< 0.005	0.20	0.27	1,279
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.07	1.24	0.00	0.00	817	817	0.00	81.6	81.6	—	619	619	0.01	< 0.005	< 0.005	621
Vendor	0.01	0.01	0.28	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	243	243	< 0.005	0.03	< 0.005	253
Hauling	0.04	0.03	1.54	0.39	0.01	0.03	354	354	0.03	35.3	35.4	—	1,221	1,221	< 0.005	0.20	0.01	1,280
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.05	1.12	0.00	0.00	576	576	0.00	57.5	57.5	—	475	475	< 0.005	< 0.005	0.05	476
Vendor	0.01	0.01	0.19	0.08	< 0.005	< 0.005	63.5	63.5	< 0.005	6.35	6.35	—	173	173	< 0.005	0.02	< 0.005	180
Hauling	0.03	0.02	1.08	0.27	0.01	0.02	249	249	0.02	24.9	24.9	—	872	872	< 0.005	0.14	0.08	914
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.20	0.00	0.00	105	105	0.00	10.5	10.5	—	78.6	78.6	< 0.005	< 0.005	0.01	78.7
Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	28.7	28.7	< 0.005	< 0.005	< 0.005	29.9
Hauling	< 0.005	< 0.005	0.20	0.05	< 0.005	< 0.005	45.5	45.5	< 0.005	4.55	4.55	—	144	144	< 0.005	0.02	0.01	151

3.27. Grading (2048) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	1.92	1.92	13.3	106	0.18	0.37	—	0.37	0.37	—	0.37	—	19,788	19,788	0.80	0.16	—	19,856
Dust From Material Movement	—	—	—	—	—	—	7.18	7.18	—	2.85	2.85	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.92	1.92	13.3	106	0.18	0.37	—	0.37	0.37	—	0.37	—	19,788	19,788	0.80	0.16	—	19,856
Dust From Material Movement	—	—	—	—	—	—	7.18	7.18	—	2.85	2.85	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.37	1.37	9.51	76.0	0.13	0.27	—	0.27	0.27	—	0.27	—	14,173	14,173	0.57	0.11	—	14,222
Dust From Material Movement	—	—	—	—	—	—	5.14	5.14	—	2.04	2.04	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.25	0.25	1.74	13.9	0.02	0.05	—	0.05	0.05	—	0.05	—	2,347	2,347	0.10	0.02	—	2,355

Dust From Material Movement	—	—	—	—	—	—	0.94	0.94	—	0.37	0.37	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.09	0.07	2.22	0.00	0.00	817	817	0.00	81.6	81.6	—	728	728	< 0.005	< 0.005	0.14	729
Vendor	0.01	0.01	0.25	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	241	241	< 0.005	0.03	< 0.005	251
Hauling	0.04	0.03	1.39	0.37	0.01	0.03	354	354	0.03	35.3	35.4	—	1,219	1,219	< 0.005	0.20	0.23	1,278
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.07	1.21	0.00	0.00	817	817	0.00	81.6	81.6	—	618	618	< 0.005	< 0.005	< 0.005	619
Vendor	0.01	0.01	0.28	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	241	241	< 0.005	0.03	< 0.005	251
Hauling	0.04	0.03	1.54	0.38	0.01	0.03	354	354	0.03	35.3	35.4	—	1,220	1,220	< 0.005	0.20	0.01	1,279
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.05	1.12	0.00	0.00	578	578	0.00	57.7	57.7	—	475	475	< 0.005	< 0.005	0.04	476
Vendor	0.01	0.01	0.19	0.08	< 0.005	< 0.005	63.7	63.7	< 0.005	6.37	6.37	—	173	173	< 0.005	0.02	< 0.005	180
Hauling	0.03	0.02	1.07	0.27	0.01	0.02	250	250	0.02	25.0	25.0	—	873	873	< 0.005	0.14	0.07	915
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.21	0.00	0.00	105	105	0.00	10.5	10.5	—	78.6	78.6	< 0.005	< 0.005	0.01	78.8
Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	28.6	28.6	< 0.005	< 0.005	< 0.005	29.8
Hauling	< 0.005	< 0.005	0.20	0.05	< 0.005	< 0.005	45.6	45.6	< 0.005	4.56	4.56	—	145	145	< 0.005	0.02	0.01	152

3.29. Grading (2049) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.92	1.92	13.3	106	0.18	0.37	—	0.37	0.37	—	0.37	—	19,788	19,788	0.80	0.16	—	19,856
Dust From Material Movement	—	—	—	—	—	—	7.18	7.18	—	2.85	2.85	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.92	1.92	13.3	106	0.18	0.37	—	0.37	0.37	—	0.37	—	19,788	19,788	0.80	0.16	—	19,856
Dust From Material Movement	—	—	—	—	—	—	7.18	7.18	—	2.85	2.85	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.37	1.37	9.48	75.7	0.13	0.27	—	0.27	0.27	—	0.27	—	14,135	14,135	0.57	0.11	—	14,183
Dust From Material Movement	—	—	—	—	—	—	5.13	5.13	—	2.04	2.04	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.25	0.25	1.73	13.8	0.02	0.05	—	0.05	0.05	—	0.05	—	2,340	2,340	0.09	0.02	—	2,348
Dust From Material Movement	—	—	—	—	—	—	0.94	0.94	—	0.37	0.37	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.09	0.07	2.19	0.00	0.00	817	817	0.00	81.6	81.6	—	726	726	< 0.005	< 0.005	0.12	728
Vendor	0.01	0.01	0.25	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	240	240	< 0.005	0.03	< 0.005	250
Hauling	0.04	0.03	1.39	0.37	0.01	0.03	354	354	0.03	35.3	35.4	—	1,218	1,218	< 0.005	0.20	0.20	1,277
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.07	1.21	0.00	0.00	817	817	0.00	81.6	81.6	—	617	617	< 0.005	< 0.005	< 0.005	618
Vendor	0.01	0.01	0.28	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	240	240	< 0.005	0.03	< 0.005	250
Hauling	0.04	0.03	1.53	0.38	0.01	0.03	354	354	0.03	35.3	35.4	—	1,219	1,219	< 0.005	0.20	0.01	1,278
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.05	1.12	0.00	0.00	576	576	0.00	57.5	57.5	—	473	473	< 0.005	< 0.005	0.04	474
Vendor	0.01	0.01	0.19	0.08	< 0.005	< 0.005	63.5	63.5	< 0.005	6.35	6.35	—	171	171	< 0.005	0.02	< 0.005	179
Hauling	0.03	0.02	1.07	0.27	0.01	0.02	249	249	0.02	24.9	24.9	—	870	870	< 0.005	0.14	0.06	912
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.20	0.00	0.00	105	105	0.00	10.5	10.5	—	78.3	78.3	< 0.005	< 0.005	0.01	78.4

Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	28.3	28.3	< 0.005	< 0.005	< 0.005	29.6
Hauling	< 0.005	< 0.005	0.20	0.05	< 0.005	< 0.005	45.5	45.5	< 0.005	4.55	4.55	—	144	144	< 0.005	0.02	0.01	151

3.31. Building Construction (2045) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.78	0.78	8.78	46.9	0.07	0.14	—	0.14	0.14	—	0.14	—	7,435	7,435	0.30	0.06	—	7,461
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.78	0.78	8.78	46.9	0.07	0.14	—	0.14	0.14	—	0.14	—	7,435	7,435	0.30	0.06	—	7,461
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.56	0.56	6.27	33.5	0.05	0.10	—	0.10	0.10	—	0.10	—	5,311	5,311	0.22	0.04	—	5,329
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.10	0.10	1.15	6.12	0.01	0.02	—	0.02	0.02	—	0.02	—	879	879	0.04	0.01	—	882
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.63	2.84	2.23	69.0	0.00	0.00	25,090	25,090	0.00	2,505	2,505	—	22,527	22,527	0.12	0.12	7.14	22,573
Vendor	0.70	0.61	15.4	6.47	0.16	0.32	5,408	5,408	0.16	540	541	—	14,750	14,750	0.06	2.23	0.47	15,417
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.60	2.52	2.23	38.2	0.00	0.00	25,090	25,090	0.00	2,505	2,505	—	19,129	19,129	0.16	0.12	0.18	19,170
Vendor	0.65	0.54	16.8	6.76	0.16	0.32	5,408	5,408	0.16	540	541	—	14,773	14,773	0.06	2.23	0.01	15,440
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.89	1.86	1.57	35.1	0.00	0.00	17,686	17,686	0.00	1,766	1,766	—	14,661	14,661	0.09	0.09	2.20	14,691
Vendor	0.48	0.41	11.7	4.70	0.12	0.23	3,812	3,812	0.12	381	381	—	10,543	10,543	0.05	1.59	0.14	11,019
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.34	0.34	0.29	6.41	0.00	0.00	3,228	3,228	0.00	322	322	—	2,427	2,427	0.01	0.01	0.36	2,432
Vendor	0.09	0.07	2.14	0.86	0.02	0.04	696	696	0.02	69.5	69.5	—	1,745	1,745	0.01	0.26	0.02	1,824
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.33. Building Construction (2046) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.78	0.78	8.78	46.9	0.07	0.14	—	0.14	0.14	—	0.14	—	7,435	7,435	0.30	0.06	—	7,461
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.78	0.78	8.78	46.9	0.07	0.14	—	0.14	0.14	—	0.14	—	7,435	7,435	0.30	0.06	—	7,461
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.56	0.56	6.27	33.5	0.05	0.10	—	0.10	0.10	—	0.10	—	5,311	5,311	0.22	0.04	—	5,329
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.10	1.15	6.12	0.01	0.02	—	0.02	0.02	—	0.02	—	879	879	0.04	0.01	—	882
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	3.59	2.80	2.19	68.9	0.00	0.00	25,090	25,090	0.00	2,505	2,505	—	22,453	22,453	0.12	0.12	6.08	22,499
Vendor	0.70	0.61	15.2	6.47	0.16	0.32	5,408	5,408	0.16	540	541	—	14,633	14,633	0.06	2.23	0.31	15,300
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.48	2.44	2.19	38.1	0.00	0.00	25,090	25,090	0.00	2,505	2,505	—	19,068	19,068	0.16	0.12	0.16	19,109
Vendor	0.62	0.54	16.7	6.74	0.16	0.32	5,408	5,408	0.16	540	541	—	14,657	14,657	0.06	2.23	0.01	15,324
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.86	1.83	1.54	34.5	0.00	0.00	17,686	17,686	0.00	1,766	1,766	—	14,614	14,614	0.09	0.09	1.88	14,644
Vendor	0.48	0.41	11.6	4.70	0.12	0.23	3,812	3,812	0.12	381	381	—	10,459	10,459	0.05	1.59	0.09	10,936
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.34	0.33	0.28	6.30	0.00	0.00	3,228	3,228	0.00	322	322	—	2,419	2,419	0.01	0.01	0.31	2,424
Vendor	0.09	0.07	2.12	0.86	0.02	0.04	696	696	0.02	69.5	69.5	—	1,732	1,732	0.01	0.26	0.02	1,811
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.35. Building Construction (2047) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.78	0.78	8.78	46.9	0.07	0.14	—	0.14	0.14	—	0.14	—	7,435	7,435	0.30	0.06	—	7,461

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.78	0.78	8.78	46.9	0.07	0.14	—	0.14	0.14	—	0.14	—	7,435	7,435	0.30	0.06	—	7,461
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.56	0.56	6.27	33.5	0.05	0.10	—	0.10	0.10	—	0.10	—	5,311	5,311	0.22	0.04	—	5,329
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.10	1.15	6.12	0.01	0.02	—	0.02	0.02	—	0.02	—	879	879	0.04	0.01	—	882
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.55	2.76	2.19	68.1	0.00	0.00	25,090	25,090	0.00	2,505	2,505	—	22,389	22,389	0.12	0.12	5.17	22,434
Vendor	0.70	0.61	15.2	6.45	0.16	0.32	5,408	5,408	0.16	540	541	—	14,533	14,533	0.06	2.07	0.20	15,151
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	2.48	2.44	2.19	38.0	0.00	0.00	25,090	25,090	0.00	2,505	2,505	—	19,015	19,015	0.16	0.12	0.13	19,055
Vendor	0.62	0.54	16.7	6.72	0.16	0.32	5,408	5,408	0.16	540	541	—	14,556	14,556	0.06	2.07	0.01	15,175
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.83	1.80	1.54	34.5	0.00	0.00	17,686	17,686	0.00	1,766	1,766	—	14,572	14,572	0.09	0.09	1.60	14,602
Vendor	0.47	0.41	11.6	4.69	0.12	0.23	3,812	3,812	0.12	381	381	—	10,388	10,388	0.05	1.48	0.06	10,829
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.33	0.33	0.28	6.29	0.00	0.00	3,228	3,228	0.00	322	322	—	2,413	2,413	0.01	0.01	0.26	2,418
Vendor	0.09	0.07	2.12	0.86	0.02	0.04	696	696	0.02	69.5	69.5	—	1,720	1,720	0.01	0.24	0.01	1,793
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.37. Building Construction (2048) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.78	0.78	8.78	46.9	0.07	0.14	—	0.14	0.14	—	0.14	—	7,435	7,435	0.30	0.06	—	7,461
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.78	0.78	8.78	46.9	0.07	0.14	—	0.14	0.14	—	0.14	—	7,435	7,435	0.30	0.06	—	7,461
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.56	0.56	6.29	33.6	0.05	0.10	—	0.10	0.10	—	0.10	—	5,325	5,325	0.22	0.04	—	5,344
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.10	1.15	6.13	0.01	0.02	—	0.02	0.02	—	0.02	—	882	882	0.04	0.01	—	885
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.80	2.76	2.19	68.1	0.00	0.00	25,090	25,090	0.00	2,505	2,505	—	22,339	22,339	0.12	0.12	4.44	22,383
Vendor	0.69	0.59	15.2	6.44	0.16	0.32	5,408	5,408	0.16	540	541	—	14,447	14,447	0.06	2.07	0.12	15,066
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.44	2.36	2.19	37.2	0.00	0.00	25,090	25,090	0.00	2,505	2,505	—	18,973	18,973	0.12	0.12	0.11	19,013
Vendor	0.62	0.54	16.6	6.71	0.16	0.32	5,408	5,408	0.16	540	541	—	14,471	14,471	0.06	2.07	< 0.005	15,089
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.77	1.72	1.54	34.5	0.00	0.00	17,734	17,734	0.00	1,771	1,771	—	14,580	14,580	0.09	0.09	1.37	14,609
Vendor	0.47	0.41	11.6	4.70	0.12	0.23	3,822	3,823	0.12	382	382	—	10,355	10,355	0.05	1.48	0.04	10,798
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.32	0.31	0.28	6.30	0.00	0.00	3,236	3,236	0.00	323	323	—	2,414	2,414	0.01	0.01	0.23	2,419
Vendor	0.09	0.08	2.12	0.86	0.02	0.04	698	698	0.02	69.7	69.7	—	1,714	1,714	0.01	0.25	0.01	1,788
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.39. Building Construction (2049) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.78	0.78	8.78	46.9	0.07	0.14	—	0.14	0.14	—	0.14	—	7,435	7,435	0.30	0.06	—	7,461
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.78	0.78	8.78	46.9	0.07	0.14	—	0.14	0.14	—	0.14	—	7,435	7,435	0.30	0.06	—	7,461
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.56	0.56	6.27	33.5	0.05	0.10	—	0.10	0.10	—	0.10	—	5,311	5,311	0.22	0.04	—	5,329
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.10	1.15	6.12	0.01	0.02	—	0.02	0.02	—	0.02	—	879	879	0.04	0.01	—	882
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.72	2.68	2.19	67.3	0.00	0.00	25,090	25,090	0.00	2,505	2,505	—	22,299	22,299	0.12	0.12	3.82	22,343
Vendor	0.69	0.59	15.2	6.44	0.16	0.32	5,408	5,408	0.16	540	541	—	14,374	14,374	0.06	2.07	0.07	14,992
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.40	2.36	2.19	37.1	0.00	0.00	25,090	25,090	0.00	2,505	2,505	—	18,939	18,939	0.12	0.12	0.10	18,978
Vendor	0.62	0.54	16.6	6.68	0.16	0.32	5,408	5,408	0.16	540	541	—	14,398	14,398	0.05	2.07	< 0.005	15,016
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.74	1.71	1.54	34.4	0.00	0.00	17,686	17,686	0.00	1,766	1,766	—	14,514	14,514	0.09	0.09	1.18	14,543
Vendor	0.47	0.41	11.6	4.67	0.12	0.23	3,812	3,812	0.12	381	381	—	10,274	10,274	0.05	1.48	0.02	10,716
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.32	0.31	0.28	6.28	0.00	0.00	3,228	3,228	0.00	322	322	—	2,403	2,403	0.01	0.01	0.20	2,408
Vendor	0.09	0.07	2.12	0.85	0.02	0.04	696	696	0.02	69.5	69.5	—	1,701	1,701	0.01	0.24	< 0.005	1,774
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.41. Paving (2045) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.48	0.48	5.80	31.8	0.04	0.08	—	0.08	0.08	—	0.08	—	4,532	4,532	0.18	0.04	—	4,547
Paving	12.7	12.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.48	0.48	5.80	31.8	0.04	0.08	—	0.08	0.08	—	0.08	—	4,532	4,532	0.18	0.04	—	4,547
Paving	12.7	12.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.34	0.34	4.14	22.7	0.03	0.06	—	0.06	0.06	—	0.06	—	3,237	3,237	0.13	0.03	—	3,248

Paving	9.04	9.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	0.76	4.15	0.01	0.01	—	0.01	0.01	—	0.01	—	536	536	0.02	< 0.005	—	538
Paving	1.65	1.65	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.07	0.06	1.72	0.00	0.00	627	627	0.00	62.6	62.6	—	563	563	< 0.005	< 0.005	0.18	564
Vendor	0.01	0.01	0.26	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	246	246	< 0.005	0.04	0.01	257
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.06	0.95	0.00	0.00	627	627	0.00	62.6	62.6	—	478	478	< 0.005	< 0.005	< 0.005	479
Vendor	0.01	0.01	0.28	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	246	246	< 0.005	0.04	< 0.005	257
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.04	0.88	0.00	0.00	442	442	0.00	44.1	44.1	—	366	366	< 0.005	< 0.005	0.05	367
Vendor	0.01	0.01	0.20	0.08	< 0.005	< 0.005	63.5	63.5	< 0.005	6.35	6.35	—	176	176	< 0.005	0.03	< 0.005	184
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.16	0.00	0.00	80.6	80.6	0.00	8.05	8.05	—	60.6	60.6	< 0.005	< 0.005	0.01	60.7
Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	29.1	29.1	< 0.005	< 0.005	< 0.005	30.4

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.43. Paving (2046) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.48	0.48	5.80	31.8	0.04	0.08	—	0.08	0.08	—	0.08	—	4,532	4,532	0.18	0.04	—	4,547
Paving	12.7	12.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.48	0.48	5.80	31.8	0.04	0.08	—	0.08	0.08	—	0.08	—	4,532	4,532	0.18	0.04	—	4,547
Paving	12.7	12.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.34	0.34	4.14	22.7	0.03	0.06	—	0.06	0.06	—	0.06	—	3,237	3,237	0.13	0.03	—	3,248
Paving	9.04	9.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	0.76	4.15	0.01	0.01	—	0.01	0.01	—	0.01	—	536	536	0.02	< 0.005	—	538
Paving	1.65	1.65	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.07	0.05	1.72	0.00	0.00	627	627	0.00	62.6	62.6	—	561	561	< 0.005	< 0.005	0.15	562
Vendor	0.01	0.01	0.25	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	244	244	< 0.005	0.04	0.01	255
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.05	0.95	0.00	0.00	627	627	0.00	62.6	62.6	—	476	476	< 0.005	< 0.005	< 0.005	477
Vendor	0.01	0.01	0.28	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	244	244	< 0.005	0.04	< 0.005	255
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.04	0.86	0.00	0.00	442	442	0.00	44.1	44.1	—	365	365	< 0.005	< 0.005	0.05	366
Vendor	0.01	0.01	0.19	0.08	< 0.005	< 0.005	63.5	63.5	< 0.005	6.35	6.35	—	174	174	< 0.005	0.03	< 0.005	182
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.16	0.00	0.00	80.6	80.6	0.00	8.05	8.05	—	60.4	60.4	< 0.005	< 0.005	0.01	60.5
Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	28.9	28.9	< 0.005	< 0.005	< 0.005	30.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.45. Paving (2047) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.48	0.48	5.80	31.8	0.04	0.08	—	0.08	0.08	—	0.08	—	4,532	4,532	0.18	0.04	—	4,547
Paving	12.7	12.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.48	0.48	5.80	31.8	0.04	0.08	—	0.08	0.08	—	0.08	—	4,532	4,532	0.18	0.04	—	4,547
Paving	12.7	12.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.34	0.34	4.14	22.7	0.03	0.06	—	0.06	0.06	—	0.06	—	3,237	3,237	0.13	0.03	—	3,248
Paving	9.04	9.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.06	0.06	0.76	4.15	0.01	0.01	—	0.01	0.01	—	0.01	—	536	536	0.02	< 0.005	—	538
Paving	1.65	1.65	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.07	0.05	1.70	0.00	0.00	627	627	0.00	62.6	62.6	—	559	559	< 0.005	< 0.005	0.13	560
Vendor	0.01	0.01	0.25	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	242	242	< 0.005	0.03	< 0.005	253
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.05	0.95	0.00	0.00	627	627	0.00	62.6	62.6	—	475	475	< 0.005	< 0.005	< 0.005	476
Vendor	0.01	0.01	0.28	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	243	243	< 0.005	0.03	< 0.005	253
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.04	0.86	0.00	0.00	442	442	0.00	44.1	44.1	—	364	364	< 0.005	< 0.005	0.04	365
Vendor	0.01	0.01	0.19	0.08	< 0.005	< 0.005	63.5	63.5	< 0.005	6.35	6.35	—	173	173	< 0.005	0.02	< 0.005	180
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.16	0.00	0.00	80.6	80.6	0.00	8.05	8.05	—	60.2	60.2	< 0.005	< 0.005	0.01	60.4
Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	28.7	28.7	< 0.005	< 0.005	< 0.005	29.9
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.47. Paving (2048) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.48	0.48	5.80	31.8	0.04	0.08	—	0.08	0.08	—	0.08	—	4,532	4,532	0.18	0.04	—	4,547
Paving	12.7	12.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.48	0.48	5.80	31.8	0.04	0.08	—	0.08	0.08	—	0.08	—	4,532	4,532	0.18	0.04	—	4,547
Paving	12.7	12.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.34	0.34	4.15	22.8	0.03	0.06	—	0.06	0.06	—	0.06	—	3,246	3,246	0.13	0.03	—	3,257
Paving	9.06	9.06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	0.76	4.16	0.01	0.01	—	0.01	0.01	—	0.01	—	537	537	0.02	< 0.005	—	539
Paving	1.65	1.65	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.05	1.70	0.00	0.00	627	627	0.00	62.6	62.6	—	558	558	< 0.005	< 0.005	0.11	559
Vendor	0.01	0.01	0.25	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	241	241	< 0.005	0.03	< 0.005	251
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.05	0.93	0.00	0.00	627	627	0.00	62.6	62.6	—	474	474	< 0.005	< 0.005	< 0.005	475
Vendor	0.01	0.01	0.28	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	241	241	< 0.005	0.03	< 0.005	251
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.04	0.86	0.00	0.00	443	443	0.00	44.2	44.2	—	364	364	< 0.005	< 0.005	0.03	365
Vendor	0.01	0.01	0.19	0.08	< 0.005	< 0.005	63.7	63.7	< 0.005	6.37	6.37	—	173	173	< 0.005	0.02	< 0.005	180
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.16	0.00	0.00	80.8	80.8	0.00	8.07	8.07	—	60.3	60.3	< 0.005	< 0.005	0.01	60.4
Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	28.6	28.6	< 0.005	< 0.005	< 0.005	29.8
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.49. Paving (2049) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.48	0.48	5.80	31.8	0.04	0.08	—	0.08	0.08	—	0.08	—	4,532	4,532	0.18	0.04	—	4,547
Paving	12.7	12.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.48	0.48	5.80	31.8	0.04	0.08	—	0.08	0.08	—	0.08	—	4,532	4,532	0.18	0.04	—	4,547
Paving	12.7	12.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.34	0.34	4.14	22.7	0.03	0.06	—	0.06	0.06	—	0.06	—	3,237	3,237	0.13	0.03	—	3,248
Paving	9.04	9.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	0.76	4.15	0.01	0.01	—	0.01	0.01	—	0.01	—	536	536	0.02	< 0.005	—	538
Paving	1.65	1.65	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.05	1.68	0.00	0.00	627	627	0.00	62.6	62.6	—	557	557	< 0.005	< 0.005	0.10	558
Vendor	0.01	0.01	0.25	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	240	240	< 0.005	0.03	< 0.005	250
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.05	0.93	0.00	0.00	627	627	0.00	62.6	62.6	—	473	473	< 0.005	< 0.005	< 0.005	474
Vendor	0.01	0.01	0.28	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	240	240	< 0.005	0.03	< 0.005	250
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.04	0.86	0.00	0.00	442	442	0.00	44.1	44.1	—	362	362	< 0.005	< 0.005	0.03	363
Vendor	0.01	0.01	0.19	0.08	< 0.005	< 0.005	63.5	63.5	< 0.005	6.35	6.35	—	171	171	< 0.005	0.02	< 0.005	179
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.16	0.00	0.00	80.6	80.6	0.00	8.05	8.05	—	60.0	60.0	< 0.005	< 0.005	< 0.005	60.1
Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	28.3	28.3	< 0.005	< 0.005	< 0.005	29.6
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.51. Architectural Coating (2045) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	1.94	2.89	0.01	0.01	—	0.01	0.01	—	0.01	—	401	401	0.02	< 0.005	—	402
Architectural Coatings	46.7	46.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	1.94	2.89	0.01	0.01	—	0.01	0.01	—	0.01	—	401	401	0.02	< 0.005	—	402
Architectural Coatings	46.7	46.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.05	1.38	2.06	< 0.005	0.01	—	0.01	0.01	—	0.01	—	286	286	0.01	< 0.005	—	287
Architectural Coatings	33.3	33.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.25	0.38	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	47.4	47.4	< 0.005	< 0.005	—	47.5
Architectural Coatings	6.09	6.09	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.73	0.57	0.45	13.9	0.00	0.00	5,067	5,067	0.00	506	506	—	4,549	4,549	0.02	0.02	1.44	4,559
Vendor	0.01	0.01	0.26	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	246	246	< 0.005	0.04	0.01	257
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.52	0.51	0.45	7.71	0.00	0.00	5,067	5,067	0.00	506	506	—	3,863	3,863	0.03	0.02	0.04	3,871
Vendor	0.01	0.01	0.28	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	246	246	< 0.005	0.04	< 0.005	257
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.38	0.37	0.32	7.09	0.00	0.00	3,572	3,572	0.00	357	357	—	2,961	2,961	0.02	0.02	0.44	2,967
Vendor	0.01	0.01	0.20	0.08	< 0.005	< 0.005	63.5	63.5	< 0.005	6.35	6.35	—	176	176	< 0.005	0.03	< 0.005	184
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.06	1.29	0.00	0.00	652	652	0.00	65.1	65.1	—	490	490	< 0.005	< 0.005	0.07	491
Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	29.1	29.1	< 0.005	< 0.005	< 0.005	30.4
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.53. Architectural Coating (2046) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	1.94	2.89	0.01	0.01	—	0.01	0.01	—	0.01	—	401	401	0.02	< 0.005	—	402
Architectural Coatings	46.7	46.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	1.94	2.89	0.01	0.01	—	0.01	0.01	—	0.01	—	401	401	0.02	< 0.005	—	402
Architectural Coatings	46.7	46.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.05	1.38	2.06	< 0.005	0.01	—	0.01	0.01	—	0.01	—	286	286	0.01	< 0.005	—	287

Architect Coatings	33.3	33.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.25	0.38	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	47.4	47.4	< 0.005	< 0.005	—	47.5
Architectural Coatings	6.09	6.09	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.73	0.57	0.44	13.9	0.00	0.00	5,067	5,067	0.00	506	506	—	4,535	4,535	0.02	0.02	1.23	4,544
Vendor	0.01	0.01	0.25	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	244	244	< 0.005	0.04	0.01	255
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.50	0.49	0.44	7.69	0.00	0.00	5,067	5,067	0.00	506	506	—	3,851	3,851	0.03	0.02	0.03	3,859
Vendor	0.01	0.01	0.28	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	244	244	< 0.005	0.04	< 0.005	255
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.37	0.37	0.31	6.97	0.00	0.00	3,572	3,572	0.00	357	357	—	2,951	2,951	0.02	0.02	0.38	2,957
Vendor	0.01	0.01	0.19	0.08	< 0.005	< 0.005	63.5	63.5	< 0.005	6.35	6.35	—	174	174	< 0.005	0.03	< 0.005	182
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.07	0.07	0.06	1.27	0.00	0.00	652	652	0.00	65.1	65.1	—	489	489	< 0.005	< 0.005	0.06	490
Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	28.9	28.9	< 0.005	< 0.005	< 0.005	30.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.55. Architectural Coating (2047) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	1.94	2.89	0.01	0.01	—	0.01	0.01	—	0.01	—	401	401	0.02	< 0.005	—	402
Architectural Coatings	46.7	46.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	1.94	2.89	0.01	0.01	—	0.01	0.01	—	0.01	—	401	401	0.02	< 0.005	—	402
Architectural Coatings	46.7	46.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.05	1.38	2.06	< 0.005	0.01	—	0.01	0.01	—	0.01	—	286	286	0.01	< 0.005	—	287
Architectural Coatings	33.3	33.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.25	0.38	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	47.4	47.4	< 0.005	< 0.005	—	47.5
Architectural Coatings	6.09	6.09	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.72	0.56	0.44	13.8	0.00	0.00	5,067	5,067	0.00	506	506	—	4,522	4,522	0.02	0.02	1.04	4,531
Vendor	0.01	0.01	0.25	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	242	242	< 0.005	0.03	< 0.005	253
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.50	0.49	0.44	7.67	0.00	0.00	5,067	5,067	0.00	506	506	—	3,840	3,840	0.03	0.02	0.03	3,848
Vendor	0.01	0.01	0.28	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	243	243	< 0.005	0.03	< 0.005	253

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.37	0.36	0.31	6.96	0.00	0.00	3,572	3,572	0.00	357	357	—	2,943	2,943	0.02	0.02	0.32	2,949
Vendor	0.01	0.01	0.19	0.08	< 0.005	< 0.005	63.5	63.5	< 0.005	6.35	6.35	—	173	173	< 0.005	0.02	< 0.005	180
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.06	1.27	0.00	0.00	652	652	0.00	65.1	65.1	—	487	487	< 0.005	< 0.005	0.05	488
Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	28.7	28.7	< 0.005	< 0.005	< 0.005	29.9
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.57. Architectural Coating (2048) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	1.94	2.89	0.01	0.01	—	0.01	0.01	—	0.01	—	401	401	0.02	< 0.005	—	402
Architectural Coatings	46.7	46.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.06	0.06	1.94	2.89	0.01	0.01	—	0.01	0.01	—	0.01	—	401	401	0.02	< 0.005	—	402
Architectural Coatings	46.7	46.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.05	1.39	2.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	287	287	0.01	< 0.005	—	288
Architectural Coatings	33.4	33.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.25	0.38	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	47.5	47.5	< 0.005	< 0.005	—	47.7
Architectural Coatings	6.10	6.10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.57	0.56	0.44	13.7	0.00	0.00	5,067	5,067	0.00	506	506	—	4,511	4,511	0.02	0.02	0.90	4,520

Vendor	0.01	0.01	0.25	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	241	241	< 0.005	0.03	< 0.005	251
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.49	0.48	0.44	7.50	0.00	0.00	5,067	5,067	0.00	506	506	—	3,832	3,832	0.02	0.02	0.02	3,840
Vendor	0.01	0.01	0.28	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	241	241	< 0.005	0.03	< 0.005	251
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.36	0.35	0.31	6.97	0.00	0.00	3,581	3,581	0.00	358	358	—	2,944	2,944	0.02	0.02	0.28	2,950
Vendor	0.01	0.01	0.19	0.08	< 0.005	< 0.005	63.7	63.7	< 0.005	6.37	6.37	—	173	173	< 0.005	0.02	< 0.005	180
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.06	1.27	0.00	0.00	654	654	0.00	65.3	65.3	—	487	487	< 0.005	< 0.005	0.05	488
Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	28.6	28.6	< 0.005	< 0.005	< 0.005	29.8
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.59. Architectural Coating (2049) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	1.94	2.89	0.01	0.01	—	0.01	0.01	—	0.01	—	401	401	0.02	< 0.005	—	402

Architectural Coatings	46.7	46.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	1.94	2.89	0.01	0.01	—	0.01	0.01	—	0.01	—	401	401	0.02	< 0.005	—	402
Architectural Coatings	46.7	46.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.05	1.38	2.06	< 0.005	0.01	—	0.01	0.01	—	0.01	—	286	286	0.01	< 0.005	—	287
Architectural Coatings	33.3	33.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.25	0.38	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	47.4	47.4	< 0.005	< 0.005	—	47.5

Architectural Coating	6.09	6.09	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.55	0.54	0.44	13.6	0.00	0.00	5,067	5,067	0.00	506	506	—	4,503	4,503	0.02	0.02	0.77	4,512
Vendor	0.01	0.01	0.25	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	240	240	< 0.005	0.03	< 0.005	250
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.48	0.48	0.44	7.50	0.00	0.00	5,067	5,067	0.00	506	506	—	3,825	3,825	0.02	0.02	0.02	3,833
Vendor	0.01	0.01	0.28	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	240	240	< 0.005	0.03	< 0.005	250
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.35	0.35	0.31	6.95	0.00	0.00	3,572	3,572	0.00	357	357	—	2,931	2,931	0.02	0.02	0.24	2,937
Vendor	0.01	0.01	0.19	0.08	< 0.005	< 0.005	63.5	63.5	< 0.005	6.35	6.35	—	171	171	< 0.005	0.02	< 0.005	179
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.06	1.27	0.00	0.00	652	652	0.00	65.1	65.1	—	485	485	< 0.005	< 0.005	0.04	486
Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	28.3	28.3	< 0.005	< 0.005	< 0.005	29.6
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Remove	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	1/1/2045	12/31/2049	5.00	1,305	—
Site Preparation	Site Preparation	1/1/2045	12/31/2049	5.00	1,305	—
Grading	Grading	1/1/2045	12/31/2049	5.00	1,305	—
Building Construction	Building Construction	1/1/2045	12/31/2049	5.00	1,305	—
Paving	Paving	1/1/2045	12/31/2049	5.00	1,305	—
Architectural Coating	Architectural Coating	1/1/2045	12/31/2049	5.00	1,305	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Rubber Tired Dozers	Diesel	Tier 4 Final	6.00	8.00	367	0.40
Demolition	Excavators	Diesel	Tier 4 Final	9.00	8.00	36.0	0.38
Demolition	Concrete/Industrial Saws	Diesel	Tier 4 Final	3.00	8.00	33.0	0.73
Site Preparation	Rubber Tired Dozers	Diesel	Tier 4 Final	9.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	12.0	8.00	84.0	0.37
Grading	Graders	Diesel	Tier 4 Final	3.00	8.00	148	0.41
Grading	Excavators	Diesel	Tier 4 Final	6.00	8.00	36.0	0.38

Grading	Tractors/Loaders/Back	Diesel	Tier 4 Final	6.00	8.00	84.0	0.37
Grading	Scrapers	Diesel	Tier 4 Final	6.00	8.00	423	0.48
Grading	Rubber Tired Dozers	Diesel	Tier 4 Final	3.00	8.00	367	0.40
Building Construction	Forklifts	Diesel	Tier 4 Final	9.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Tier 4 Final	3.00	8.00	25.0	0.74
Building Construction	Cranes	Diesel	Tier 4 Final	3.00	7.00	367	0.29
Building Construction	Welders	Diesel	Tier 4 Final	3.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Back hoes	Diesel	Tier 4 Final	9.00	7.00	84.0	0.37
Paving	Pavers	Diesel	Tier 4 Final	6.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Tier 4 Final	6.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Tier 4 Final	6.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Tier 4 Final	3.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	46.0	18.5	LDA,LDT1,LDT2
Demolition	Vendor	12.0	10.2	HHDT,MHDT
Demolition	Hauling	2.00	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	54.0	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	12.0	10.2	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—

Grading	Worker	60.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	12.0	10.2	HHDT,MHDT
Grading	Hauling	24.0	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	1,842	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	720	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	46.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	12.0	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	372	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	12.0	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Control Strategies Applied	PM10 Reduction	PM2.5 Reduction
Water unpaved roads twice daily	74%	74%
Limit vehicle speeds on unpaved roads to 25 mph	44%	44%
Sweep paved roads once per month	9%	9%

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00	0.00	6,569,501	2,189,834	—

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (Building Square Footage)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	50,000	—
Site Preparation	—	—	5,873	0.00	—
Grading	125,000	125,000	11,745	0.00	—
Paving	0.00	0.00	0.00	0.00	6,303

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	3	74%	74%
Water Demolished Area	2	36%	36%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
General Heavy Industry	3,977	100%
Manufacturing	1,144	100%
Manufacturing	276	100%
General Heavy Industry	905	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2045	0.00	457	0.03	< 0.005
2046	0.00	457	0.03	< 0.005
2047	0.00	457	0.03	< 0.005
2048	0.00	457	0.03	< 0.005
2049	0.00	457	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	—	annual days of extreme heat
Extreme Precipitation	—	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	—	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	11.6
AQ-PM	19.1

AQ-DPM	9.09
Drinking Water	30.6
Lead Risk Housing	50.8
Pesticides	90.5
Toxic Releases	7.58
Traffic	3.06
Effect Indicators	—
CleanUp Sites	74.2
Groundwater	77.9
Haz Waste Facilities/Generators	93.2
Impaired Water Bodies	100.0
Solid Waste	86.5
Sensitive Population	—
Asthma	87.6
Cardio-vascular	83.2
Low Birth Weights	26.9
Socioeconomic Factor Indicators	—
Education	82.7
Housing	51.4
Linguistic	88.8
Poverty	94.9
Unemployment	99.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	16.66880534

Employed	7.173104068
Median HI	5.299627871
Education	—
Bachelor's or higher	5.017323239
High school enrollment	16.8741178
Preschool enrollment	68.89516233
Transportation	—
Auto Access	18.40112922
Active commuting	51.10997049
Social	—
2-parent households	13.28114975
Voting	16.79712563
Neighborhood	—
Alcohol availability	70.25535737
Park access	33.85089183
Retail density	4.311561658
Supermarket access	49.58295907
Tree canopy	0.782753753
Housing	—
Homeownership	38.3036058
Housing habitability	30.96368536
Low-inc homeowner severe housing cost burden	26.76761196
Low-inc renter severe housing cost burden	52.89362248
Uncrowded housing	38.58591043
Health Outcomes	—
Insured adults	21.00603105
Arthritis	0.0
Asthma ER Admissions	30.1

High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	41.7
Cognitively Disabled	50.3
Physically Disabled	19.5
Heart Attack ER Admissions	46.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	54.3
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	14.1
Elderly	42.0
English Speaking	18.7
Foreign-born	65.3
Outdoor Workers	5.4

Climate Change Adaptive Capacity	—
Impervious Surface Cover	85.8
Traffic Density	4.9
Traffic Access	23.0
Other Indices	—
Hardship	92.9
Other Decision Support	—
2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	82.0
Healthy Places Index Score for Project Location (b)	11.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification

Construction: Construction Phases	Land use data are based applicant-provided buildout assumptions. Phase 3 (2050-2054) represents 50% of 10-year buildout. CalEEMod limits dates to those before 1/1/2050; therefore, the actual construction dates for Phase 3B are not modeled.
Construction: Off-Road Equipment	Equipment increased based on scaler per buildout methodology.
Construction: Trips and VMT	Trips increased based on scaler per buildout methodology.
Construction: On-Road Fugitive Dust	All roads used by future developments projects within the Specific Plan Area would be required to be paved. Per ICAPCD guidance a value of 85% paved is assumed in the modeling to account for the high levels of entrained dust generated from vehicle travel on paved roadways in the region. PM reductions altered based on dust control plan implementation strategies (watering unpaved roads three times per day).
Construction: Paving	Paved area acreages calculated based on buildout estimates. Conservatively assumed 100% asphalt.

LV Construction - Phase 1 Geothermal Drilling Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	LV Construction - Phase 1 Geothermal Drilling
Construction Start Date	1/1/2025
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	4.80
Location	33.18829759139308, -115.6026869228474
County	Imperial
City	Unincorporated
Air District	Imperial County APCD
Air Basin	Salton Sea
TAZ	5600
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
General Heavy Industry	7.00	1000sqft	0.16	7,469,299	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.53	2.41	42.0	117	0.20	0.38	2,166	2,167	0.38	216	217	—	21,764	21,764	0.71	1.05	16.3	22,111
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.40	2.30	42.8	113	0.20	0.38	2,166	2,167	0.38	216	217	—	21,606	21,606	0.71	1.05	0.42	21,937
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.76	1.67	30.4	81.6	0.14	0.27	1,531	1,532	0.27	153	153	—	15,478	15,478	0.51	0.75	5.04	15,719
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.32	0.30	5.56	14.9	0.03	0.05	279	280	0.05	27.9	28.0	—	2,563	2,563	0.08	0.12	0.83	2,603

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	2.53	2.41	42.0	117	0.20	0.38	2,166	2,167	0.38	216	217	—	21,764	21,764	0.71	1.05	16.3	22,111

2026	2.48	2.38	41.8	116	0.20	0.38	2,166	2,167	0.38	216	217	—	21,637	21,637	0.70	1.01	15.2	21,972
2027	2.45	2.36	41.6	115	0.20	0.38	2,166	2,167	0.38	216	217	—	21,489	21,489	0.70	1.01	14.0	21,823
2028	2.43	2.31	41.4	115	0.20	0.38	2,166	2,167	0.38	216	217	—	21,327	21,327	0.70	0.98	12.8	21,648
2029	2.38	2.29	41.3	114	0.20	0.38	2,166	2,167	0.38	216	217	—	21,169	21,169	0.70	0.94	11.7	21,479
2030	2.36	2.27	41.1	114	0.20	0.38	2,166	2,167	0.38	216	217	—	21,018	21,018	0.67	0.94	10.6	21,324
2031	2.34	2.25	40.9	113	0.20	0.38	2,166	2,167	0.38	216	217	—	20,875	20,875	0.67	0.90	9.56	21,171
2032	2.29	2.23	40.8	113	0.20	0.38	2,166	2,167	0.38	216	217	—	20,744	20,744	0.67	0.90	8.56	21,037
2033	2.28	2.19	40.7	113	0.20	0.38	2,166	2,167	0.38	216	217	—	20,631	20,631	0.67	0.84	7.64	20,905
2034	2.26	2.17	40.6	112	0.20	0.38	2,166	2,167	0.38	216	217	—	20,531	20,531	0.66	0.84	6.75	20,804
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	2.40	2.30	42.8	113	0.20	0.38	2,166	2,167	0.38	216	217	—	21,606	21,606	0.71	1.05	0.42	21,937
2026	2.38	2.28	42.5	113	0.20	0.38	2,166	2,167	0.38	216	217	—	21,482	21,482	0.71	1.02	0.39	21,803
2027	2.33	2.24	42.3	112	0.20	0.38	2,166	2,167	0.38	216	217	—	21,337	21,337	0.71	1.01	0.36	21,658
2028	2.31	2.22	42.1	112	0.20	0.38	2,166	2,167	0.38	216	217	—	21,179	21,179	0.68	0.98	0.33	21,487
2029	2.30	2.21	41.8	112	0.20	0.38	2,166	2,167	0.38	216	217	—	21,023	21,023	0.67	0.94	0.30	21,322
2030	2.26	2.20	41.7	111	0.20	0.38	2,166	2,167	0.38	216	217	—	20,876	20,876	0.67	0.94	0.28	21,172
2031	2.24	2.18	41.5	111	0.20	0.38	2,166	2,167	0.38	216	217	—	20,736	20,736	0.67	0.91	0.25	21,022
2032	2.23	2.14	41.4	111	0.20	0.38	2,166	2,167	0.38	216	217	—	20,607	20,607	0.67	0.90	0.22	20,892
2033	2.22	2.13	41.2	111	0.20	0.38	2,166	2,167	0.38	216	217	—	20,497	20,497	0.67	0.87	0.20	20,772
2034	2.21	2.12	41.1	111	0.20	0.38	2,166	2,167	0.38	216	217	—	20,398	20,398	0.67	0.87	0.18	20,673
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	1.76	1.67	30.4	81.6	0.14	0.27	1,527	1,527	0.27	153	153	—	15,478	15,478	0.51	0.75	5.04	15,719
2026	1.72	1.65	30.3	81.3	0.14	0.27	1,527	1,527	0.27	153	153	—	15,389	15,389	0.50	0.72	4.70	15,622
2027	1.71	1.64	30.1	80.9	0.14	0.27	1,527	1,527	0.27	153	153	—	15,285	15,285	0.50	0.72	4.32	15,517
2028	1.68	1.61	30.0	80.8	0.14	0.27	1,531	1,532	0.27	153	153	—	15,212	15,212	0.50	0.70	3.97	15,437
2029	1.66	1.59	29.8	80.4	0.14	0.27	1,527	1,527	0.27	153	153	—	15,059	15,059	0.48	0.67	3.61	15,275

2030	1.65	1.58	29.7	80.1	0.14	0.27	1,527	1,527	0.27	153	153	—	14,952	14,952	0.48	0.67	3.27	15,167
2031	1.62	1.57	29.6	79.9	0.14	0.27	1,527	1,527	0.27	153	153	—	14,851	14,851	0.48	0.65	2.95	15,059
2032	1.61	1.55	29.6	79.9	0.14	0.27	1,531	1,532	0.27	153	153	—	14,799	14,799	0.48	0.64	2.65	15,006
2033	1.60	1.54	29.4	79.5	0.14	0.27	1,527	1,527	0.27	153	153	—	14,679	14,679	0.48	0.62	2.35	14,878
2034	1.59	1.53	29.3	79.3	0.14	0.27	1,527	1,527	0.27	153	153	—	14,608	14,608	0.47	0.62	2.08	14,807
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.32	0.30	5.56	14.9	0.03	0.05	279	279	0.05	27.8	27.9	—	2,563	2,563	0.08	0.12	0.83	2,603
2026	0.31	0.30	5.52	14.8	0.03	0.05	279	279	0.05	27.8	27.9	—	2,548	2,548	0.08	0.12	0.78	2,586
2027	0.31	0.30	5.49	14.8	0.03	0.05	279	279	0.05	27.8	27.9	—	2,531	2,531	0.08	0.12	0.72	2,569
2028	0.31	0.29	5.48	14.7	0.03	0.05	279	280	0.05	27.9	28.0	—	2,519	2,519	0.08	0.12	0.66	2,556
2029	0.30	0.29	5.44	14.7	0.03	0.05	279	279	0.05	27.8	27.9	—	2,493	2,493	0.08	0.11	0.60	2,529
2030	0.30	0.29	5.42	14.6	0.03	0.05	279	279	0.05	27.8	27.9	—	2,476	2,476	0.08	0.11	0.54	2,511
2031	0.30	0.29	5.40	14.6	0.03	0.05	279	279	0.05	27.8	27.9	—	2,459	2,459	0.08	0.11	0.49	2,493
2032	0.29	0.28	5.40	14.6	0.03	0.05	279	280	0.05	27.9	28.0	—	2,450	2,450	0.08	0.11	0.44	2,484
2033	0.29	0.28	5.36	14.5	0.03	0.05	279	279	0.05	27.8	27.9	—	2,430	2,430	0.08	0.10	0.39	2,463
2034	0.29	0.28	5.35	14.5	0.03	0.05	279	279	0.05	27.8	27.9	—	2,419	2,419	0.08	0.10	0.34	2,451

3. Construction Emissions Details

3.1. Drilling- All Facilities (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.83	1.83	35.3	107	0.16	0.28	—	0.28	0.28	—	0.28	—	15,060	15,060	0.61	0.12	—	15,112

Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.83	1.83	35.3	107	0.16	0.28	—	0.28	0.28	—	0.28	—	15,060	15,060	0.61	0.12	—	15,112
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.31	1.31	25.2	76.3	0.11	0.20	—	0.20	0.20	—	0.20	—	10,757	10,757	0.44	0.09	—	10,794
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.24	0.24	4.60	13.9	0.02	0.04	—	0.04	0.04	—	0.04	—	1,781	1,781	0.07	0.01	—	1,787

Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.51	0.45	0.42	7.98	0.00	0.00	926	926	0.00	92.5	92.5	—	1,048	1,048	0.04	0.03	3.69	1,062
Vendor	0.03	0.03	0.70	0.33	< 0.005	0.01	150	150	0.01	15.0	15.0	—	630	630	0.01	0.09	1.74	657
Hauling	0.15	0.10	5.60	1.41	0.03	0.10	1,090	1,090	0.10	109	109	—	5,027	5,027	0.05	0.81	10.9	5,280
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.39	0.35	0.50	4.51	0.00	0.00	926	926	0.00	92.5	92.5	—	885	885	0.04	0.03	0.10	896
Vendor	0.03	0.02	0.77	0.33	< 0.005	0.01	150	150	0.01	15.0	15.0	—	630	630	0.01	0.09	0.05	656
Hauling	0.15	0.09	6.18	1.44	0.03	0.10	1,090	1,090	0.10	109	109	—	5,031	5,031	0.05	0.81	0.28	5,273
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.31	0.27	0.34	4.06	0.00	0.00	653	653	0.00	65.2	65.2	—	680	680	0.03	0.02	1.14	689
Vendor	0.02	0.02	0.54	0.24	< 0.005	0.01	106	106	0.01	10.6	10.6	—	450	450	0.01	0.06	0.54	469
Hauling	0.11	0.07	4.33	1.02	0.02	0.07	768	768	0.07	76.8	76.8	—	3,592	3,592	0.03	0.58	3.37	3,768
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.06	0.74	0.00	0.00	119	119	0.00	11.9	11.9	—	113	113	< 0.005	< 0.005	0.19	114
Vendor	< 0.005	< 0.005	0.10	0.04	< 0.005	< 0.005	19.3	19.3	< 0.005	1.93	1.93	—	74.5	74.5	< 0.005	0.01	0.09	77.6
Hauling	0.02	0.01	0.79	0.19	< 0.005	0.01	140	140	0.01	14.0	14.0	—	595	595	0.01	0.10	0.56	624

3.3. Drilling- All Facilities (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.83	1.83	35.3	107	0.16	0.28	—	0.28	0.28	—	0.28	—	15,071	15,071	0.61	0.12	—	15,122
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.83	1.83	35.3	107	0.16	0.28	—	0.28	0.28	—	0.28	—	15,071	15,071	0.61	0.12	—	15,122
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.31	1.31	25.2	76.3	0.11	0.20	—	0.20	0.20	—	0.20	—	10,765	10,765	0.44	0.09	—	10,802
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.24	0.24	4.60	13.9	0.02	0.04	—	0.04	0.04	—	0.04	—	1,782	1,782	0.07	0.01	—	1,788
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.45	0.42	0.39	7.35	0.00	0.00	926	926	0.00	92.5	92.5	—	1,027	1,027	0.04	0.03	3.37	1,042
Vendor	0.03	0.03	0.67	0.30	< 0.005	0.01	150	150	0.01	15.0	15.0	—	618	618	0.01	0.09	1.55	645
Hauling	0.15	0.10	5.47	1.38	0.03	0.10	1,090	1,090	0.10	109	109	—	4,921	4,921	0.05	0.77	10.3	5,163
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.37	0.33	0.44	4.14	0.00	0.00	926	926	0.00	92.5	92.5	—	868	868	0.04	0.03	0.09	879
Vendor	0.03	0.02	0.74	0.31	< 0.005	0.01	150	150	0.01	15.0	15.0	—	618	618	0.01	0.09	0.04	644
Hauling	0.15	0.09	6.01	1.41	0.03	0.10	1,090	1,090	0.10	109	109	—	4,925	4,925	0.05	0.77	0.27	5,157
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.28	0.25	0.31	3.75	0.00	0.00	653	653	0.00	65.2	65.2	—	667	667	0.03	0.02	1.04	676
Vendor	0.02	0.02	0.52	0.22	< 0.005	0.01	106	106	0.01	10.6	10.6	—	441	441	0.01	0.06	0.48	460
Hauling	0.11	0.07	4.21	0.99	0.02	0.07	768	768	0.07	76.8	76.9	—	3,516	3,516	0.03	0.55	3.18	3,685
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.06	0.68	0.00	0.00	119	119	0.00	11.9	11.9	—	110	110	< 0.005	< 0.005	0.17	112

Vendor	< 0.005	< 0.005	0.09	0.04	< 0.005	< 0.005	19.3	19.3	< 0.005	1.93	1.93	—	73.1	73.1	< 0.005	0.01	0.08	76.2
Hauling	0.02	0.01	0.77	0.18	< 0.005	0.01	140	140	0.01	14.0	14.0	—	582	582	0.01	0.09	0.53	610

3.5. Drilling- All Facilities (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.83	1.83	35.3	107	0.16	0.28	—	0.28	0.28	—	0.28	—	15,065	15,065	0.61	0.12	—	15,117
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.83	1.83	35.3	107	0.16	0.28	—	0.28	0.28	—	0.28	—	15,065	15,065	0.61	0.12	—	15,117
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	1.31	1.31	25.2	76.3	0.11	0.20	—	0.20	0.20	—	0.20	—	10,761	10,761	0.44	0.09	—	10,798
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.24	0.24	4.60	13.9	0.02	0.04	—	0.04	0.04	—	0.04	—	1,782	1,782	0.07	0.01	—	1,788
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.43	0.40	0.36	6.66	0.00	0.00	926	926	0.00	92.5	92.5	—	1,009	1,009	0.04	0.03	3.07	1,024
Vendor	0.03	0.03	0.64	0.28	< 0.005	0.01	150	150	0.01	15.0	15.0	—	605	605	0.01	0.08	1.35	632
Hauling	0.15	0.10	5.33	1.35	0.03	0.10	1,090	1,090	0.10	109	109	—	4,809	4,809	0.05	0.77	9.57	5,050
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.32	0.29	0.41	3.73	0.00	0.00	926	926	0.00	92.5	92.5	—	853	853	0.04	0.03	0.08	865
Vendor	0.03	0.02	0.70	0.29	< 0.005	0.01	150	150	0.01	15.0	15.0	—	606	606	0.01	0.09	0.04	631
Hauling	0.14	0.09	5.87	1.38	0.03	0.10	1,090	1,090	0.10	109	109	—	4,813	4,813	0.05	0.77	0.25	5,045
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.27	0.24	0.27	3.38	0.00	0.00	653	653	0.00	65.2	65.2	—	655	655	0.03	0.02	0.95	664

Vendor	0.02	0.02	0.49	0.20	< 0.005	0.01	106	106	0.01	10.6	10.6	—	432	432	0.01	0.06	0.42	451
Hauling	0.11	0.07	4.11	0.97	0.02	0.07	768	768	0.07	76.8	76.9	—	3,436	3,436	0.03	0.55	2.96	3,605
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.05	0.62	0.00	0.00	119	119	0.00	11.9	11.9	—	108	108	< 0.005	< 0.005	0.16	110
Vendor	< 0.005	< 0.005	0.09	0.04	< 0.005	< 0.005	19.3	19.3	< 0.005	1.93	1.93	—	71.6	71.6	< 0.005	0.01	0.07	74.7
Hauling	0.02	0.01	0.75	0.18	< 0.005	0.01	140	140	0.01	14.0	14.0	—	569	569	0.01	0.09	0.49	597

3.7. Drilling- All Facilities (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.83	1.83	35.3	107	0.16	0.28	—	0.28	0.28	—	0.28	—	15,063	15,063	0.61	0.12	—	15,115
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.83	1.83	35.3	107	0.16	0.28	—	0.28	0.28	—	0.28	—	15,063	15,063	0.61	0.12	—	15,115

Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.31	1.31	25.3	76.5	0.11	0.20	—	0.20	0.20	—	0.20	—	10,789	10,789	0.44	0.09	—	10,826
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.24	0.24	4.62	14.0	0.02	0.04	—	0.04	0.04	—	0.04	—	1,786	1,786	0.07	0.01	—	1,792
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.41	0.35	0.33	6.18	0.00	0.00	926	926	0.00	92.5	92.5	—	990	990	0.04	0.03	2.78	1,004
Vendor	0.03	0.02	0.61	0.26	< 0.005	0.01	150	150	0.01	15.0	15.0	—	590	590	0.01	0.08	1.16	615
Hauling	0.15	0.10	5.19	1.32	0.03	0.10	1,090	1,090	0.10	109	109	—	4,684	4,684	0.05	0.74	8.87	4,914

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.31	0.28	0.38	3.46	0.00	0.00	926	926	0.00	92.5	92.5	—	838	838	0.01	0.03	0.07	848
Vendor	0.02	0.02	0.67	0.27	< 0.005	0.01	150	150	0.01	15.0	15.0	—	590	590	0.01	0.08	0.03	614
Hauling	0.14	0.09	5.70	1.35	0.03	0.10	1,090	1,090	0.10	109	109	—	4,688	4,688	0.05	0.74	0.23	4,910
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.24	0.21	0.25	3.14	0.00	0.00	655	655	0.00	65.4	65.4	—	645	645	0.03	0.02	0.86	653
Vendor	0.02	0.01	0.47	0.19	< 0.005	0.01	106	106	0.01	10.6	10.6	—	423	423	0.01	0.06	0.36	440
Hauling	0.11	0.07	4.02	0.95	0.02	0.07	770	770	0.07	77.0	77.1	—	3,356	3,356	0.03	0.53	2.75	3,517
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.05	0.57	0.00	0.00	119	119	0.00	11.9	11.9	—	107	107	< 0.005	< 0.005	0.14	108
Vendor	< 0.005	< 0.005	0.09	0.03	< 0.005	< 0.005	19.4	19.4	< 0.005	1.94	1.94	—	70.0	70.0	< 0.005	0.01	0.06	72.9
Hauling	0.02	0.01	0.73	0.17	< 0.005	0.01	141	141	0.01	14.1	14.1	—	556	556	0.01	0.09	0.46	582

3.9. Drilling- All Facilities (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.83	1.83	35.3	107	0.16	0.28	—	0.28	0.28	—	0.28	—	15,061	15,061	0.61	0.12	—	15,113
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.83	1.83	35.3	107	0.16	0.28	—	0.28	0.28	—	0.28	—	15,061	15,061	0.61	0.12	—	15,113
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.31	1.31	25.2	76.3	0.11	0.20	—	0.20	0.20	—	0.20	—	10,758	10,758	0.44	0.09	—	10,795
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.24	0.24	4.60	13.9	0.02	0.04	—	0.04	0.04	—	0.04	—	1,781	1,781	0.07	0.01	—	1,787
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.36	0.33	0.30	5.70	0.00	0.00	926	926	0.00	92.5	92.5	—	972	972	0.04	0.03	2.51	986
Vendor	0.03	0.02	0.59	0.24	< 0.005	0.01	150	150	0.01	15.0	15.0	—	574	574	0.01	0.08	0.98	599
Hauling	0.15	0.10	5.08	1.32	0.03	0.10	1,090	1,090	0.10	109	109	—	4,562	4,562	0.05	0.71	8.21	4,782
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.30	0.26	0.32	3.19	0.00	0.00	926	926	0.00	92.5	92.5	—	823	823	0.01	0.03	0.07	833
Vendor	0.02	0.02	0.64	0.25	< 0.005	0.01	150	150	0.01	15.0	15.0	—	574	574	0.01	0.08	0.03	598
Hauling	0.14	0.09	5.56	1.35	0.03	0.10	1,090	1,090	0.10	109	109	—	4,565	4,565	0.04	0.71	0.21	4,778
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.22	0.20	0.23	2.91	0.00	0.00	653	653	0.00	65.2	65.2	—	631	631	0.01	0.02	0.77	639
Vendor	0.02	0.01	0.45	0.18	< 0.005	0.01	106	106	0.01	10.6	10.6	—	410	410	0.01	0.06	0.30	427
Hauling	0.11	0.07	3.91	0.95	0.02	0.07	768	768	0.07	76.8	76.9	—	3,259	3,259	0.03	0.51	2.53	3,413
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.04	0.53	0.00	0.00	119	119	0.00	11.9	11.9	—	105	105	< 0.005	< 0.005	0.13	106
Vendor	< 0.005	< 0.005	0.08	0.03	< 0.005	< 0.005	19.3	19.3	< 0.005	1.93	1.93	—	67.9	67.9	< 0.005	0.01	0.05	70.8
Hauling	0.02	0.01	0.71	0.17	< 0.005	0.01	140	140	0.01	14.0	14.0	—	540	540	0.01	0.08	0.42	565

3.11. Drilling- All Facilities (2030) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	1.83	1.83	35.3	107	0.16	0.28	—	0.28	0.28	—	0.28	—	15,061	15,061	0.61	0.12	—	15,113
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.83	1.83	35.3	107	0.16	0.28	—	0.28	0.28	—	0.28	—	15,061	15,061	0.61	0.12	—	15,113
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.31	1.31	25.2	76.3	0.11	0.20	—	0.20	0.20	—	0.20	—	10,758	10,758	0.44	0.09	—	10,795
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.24	0.24	4.60	13.9	0.02	0.04	—	0.04	0.04	—	0.04	—	1,781	1,781	0.07	0.01	—	1,787

Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.34	0.31	0.27	5.27	0.00	0.00	926	926	0.00	92.5	92.5	—	955	955	0.01	0.03	2.25	967
Vendor	0.03	0.02	0.56	0.23	< 0.005	0.01	150	150	0.01	15.0	15.0	—	557	557	0.01	0.08	0.82	580
Hauling	0.15	0.10	4.94	1.29	0.03	0.10	1,090	1,090	0.10	109	109	—	4,445	4,445	0.04	0.71	7.51	4,664
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.26	0.25	0.29	2.95	0.00	0.00	926	926	0.00	92.5	92.5	—	808	808	0.01	0.03	0.06	818
Vendor	0.02	0.02	0.62	0.24	< 0.005	0.01	150	150	0.01	15.0	15.0	—	557	557	0.01	0.08	0.02	580
Hauling	0.14	0.09	5.45	1.32	0.03	0.10	1,090	1,090	0.10	109	109	—	4,449	4,449	0.04	0.71	0.20	4,661
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.21	0.19	0.21	2.68	0.00	0.00	653	653	0.00	65.2	65.2	—	620	620	0.01	0.02	0.69	628
Vendor	0.02	0.01	0.43	0.17	< 0.005	0.01	106	106	0.01	10.6	10.6	—	398	398	0.01	0.05	0.25	414
Hauling	0.11	0.07	3.81	0.93	0.02	0.07	768	768	0.07	76.8	76.9	—	3,176	3,176	0.03	0.51	2.32	3,330
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.04	0.49	0.00	0.00	119	119	0.00	11.9	11.9	—	103	103	< 0.005	< 0.005	0.11	104
Vendor	< 0.005	< 0.005	0.08	0.03	< 0.005	< 0.005	19.3	19.3	< 0.005	1.93	1.93	—	65.9	65.9	< 0.005	0.01	0.04	68.6
Hauling	0.02	0.01	0.70	0.17	< 0.005	0.01	140	140	0.01	14.0	14.0	—	526	526	0.01	0.08	0.38	551

3.13. Drilling- All Facilities (2031) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.83	1.83	35.3	107	0.16	0.28	—	0.28	0.28	—	0.28	—	15,061	15,061	0.61	0.12	—	15,113
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.83	1.83	35.3	107	0.16	0.28	—	0.28	0.28	—	0.28	—	15,061	15,061	0.61	0.12	—	15,113
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.31	1.31	25.2	76.3	0.11	0.20	—	0.20	0.20	—	0.20	—	10,758	10,758	0.44	0.09	—	10,795
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.24	0.24	4.60	13.9	0.02	0.04	—	0.04	0.04	—	0.04	—	1,781	1,781	0.07	0.01	—	1,787
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.32	0.29	0.24	4.88	0.00	0.00	926	926	0.00	92.5	92.5	—	939	939	0.01	0.03	2.01	951
Vendor	0.03	0.02	0.54	0.22	< 0.005	0.01	150	150	0.01	15.0	15.0	—	540	540	0.01	0.08	0.68	563
Hauling	0.15	0.10	4.84	1.26	0.03	0.10	1,090	1,090	0.10	109	109	—	4,334	4,334	0.04	0.67	6.86	4,543
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.24	0.24	0.26	2.72	0.00	0.00	926	926	0.00	92.5	92.5	—	795	795	0.01	0.03	0.05	805
Vendor	0.02	0.02	0.60	0.23	< 0.005	0.01	150	150	0.01	15.0	15.0	—	541	541	0.01	0.08	0.02	563
Hauling	0.14	0.09	5.32	1.30	0.03	0.10	1,090	1,090	0.10	109	109	—	4,338	4,338	0.04	0.68	0.18	4,541
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.18	0.18	0.19	2.48	0.00	0.00	653	653	0.00	65.2	65.2	—	610	610	0.01	0.02	0.62	618
Vendor	0.02	0.01	0.42	0.16	< 0.005	0.01	106	106	0.01	10.6	10.6	—	386	386	0.01	0.05	0.21	402
Hauling	0.11	0.07	3.74	0.91	0.02	0.07	768	768	0.07	76.8	76.9	—	3,097	3,097	0.03	0.48	2.12	3,243
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.45	0.00	0.00	119	119	0.00	11.9	11.9	—	101	101	< 0.005	< 0.005	0.10	102

Vendor	< 0.005	< 0.005	0.08	0.03	< 0.005	< 0.005	19.3	19.3	< 0.005	1.93	1.93	—	63.9	63.9	< 0.005	0.01	0.03	66.6
Hauling	0.02	0.01	0.68	0.17	< 0.005	0.01	140	140	0.01	14.0	14.0	—	513	513	0.01	0.08	0.35	537

3.15. Drilling- All Facilities (2032) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.83	1.83	35.3	107	0.16	0.28	—	0.28	0.28	—	0.28	—	15,061	15,061	0.61	0.12	—	15,113
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.83	1.83	35.3	107	0.16	0.28	—	0.28	0.28	—	0.28	—	15,061	15,061	0.61	0.12	—	15,113
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	1.31	1.31	25.3	76.5	0.11	0.20	—	0.20	0.20	—	0.20	—	10,787	10,787	0.44	0.09	—	10,824
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.24	0.24	4.62	14.0	0.02	0.04	—	0.04	0.04	—	0.04	—	1,786	1,786	0.07	0.01	—	1,792
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.28	0.28	0.21	4.54	0.00	0.00	926	926	0.00	92.5	92.5	—	925	925	0.01	0.03	1.79	937
Vendor	0.03	0.02	0.53	0.22	< 0.005	0.01	150	150	0.01	15.0	15.0	—	524	524	0.01	0.07	0.56	546
Hauling	0.15	0.10	4.76	1.27	0.03	0.10	1,090	1,090	0.10	109	109	—	4,234	4,234	0.04	0.67	6.21	4,442
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.23	0.20	0.23	2.54	0.00	0.00	926	926	0.00	92.5	92.5	—	784	784	0.01	0.03	0.05	794
Vendor	0.02	0.02	0.58	0.23	< 0.005	0.01	150	150	0.01	15.0	15.0	—	524	524	0.01	0.07	0.01	546
Hauling	0.14	0.09	5.25	1.30	0.03	0.10	1,090	1,090	0.10	109	109	—	4,238	4,238	0.04	0.67	0.16	4,440
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.17	0.15	0.17	2.31	0.00	0.00	655	655	0.00	65.4	65.4	—	603	603	0.01	0.02	0.55	610

Vendor	0.02	0.01	0.40	0.16	< 0.005	0.01	106	106	0.01	10.6	10.6	—	375	375	0.01	0.05	0.17	391
Hauling	0.11	0.07	3.70	0.92	0.02	0.07	770	770	0.07	77.0	77.1	—	3,034	3,034	0.03	0.48	1.92	3,180
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.42	0.00	0.00	119	119	0.00	11.9	11.9	—	99.8	99.8	< 0.005	< 0.005	0.09	101
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	19.4	19.4	< 0.005	1.94	1.94	—	62.1	62.1	< 0.005	0.01	0.03	64.7
Hauling	0.02	0.01	0.67	0.17	< 0.005	0.01	141	141	0.01	14.1	14.1	—	502	502	0.01	0.08	0.32	527

3.17. Drilling- All Facilities (2033) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.83	1.83	35.3	107	0.16	0.28	—	0.28	0.28	—	0.28	—	15,061	15,061	0.61	0.12	—	15,113
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.83	1.83	35.3	107	0.16	0.28	—	0.28	0.28	—	0.28	—	15,061	15,061	0.61	0.12	—	15,113

Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.31	1.31	25.2	76.3	0.11	0.20	—	0.20	0.20	—	0.20	—	10,758	10,758	0.44	0.09	—	10,795
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.24	0.24	4.60	13.9	0.02	0.04	—	0.04	0.04	—	0.04	—	1,781	1,781	0.07	0.01	—	1,787
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.27	0.23	0.18	4.24	0.00	0.00	926	926	0.00	92.5	92.5	—	912	912	0.01	< 0.005	1.59	915
Vendor	0.03	0.02	0.51	0.21	< 0.005	0.01	150	150	0.01	15.0	15.0	—	509	509	0.01	0.07	0.45	531
Hauling	0.15	0.10	4.69	1.24	0.03	0.10	1,090	1,090	0.10	109	109	—	4,149	4,149	0.04	0.64	5.60	4,347

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.22	0.19	0.20	2.37	0.00	0.00	926	926	0.00	92.5	92.5	—	773	773	0.01	0.03	0.04	783
Vendor	0.02	0.02	0.56	0.22	< 0.005	0.01	150	150	0.01	15.0	15.0	—	509	509	0.01	0.07	0.01	531
Hauling	0.14	0.09	5.14	1.27	0.03	0.10	1,090	1,090	0.10	109	109	—	4,153	4,153	0.04	0.64	0.15	4,345
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.17	0.15	0.14	2.16	0.00	0.00	653	653	0.00	65.2	65.2	—	593	593	0.01	0.02	0.49	600
Vendor	0.02	0.01	0.39	0.15	< 0.005	0.01	106	106	0.01	10.6	10.6	—	364	364	0.01	0.05	0.14	379
Hauling	0.11	0.07	3.61	0.90	0.02	0.07	768	768	0.07	76.8	76.9	—	2,965	2,965	0.03	0.46	1.72	3,104
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.39	0.00	0.00	119	119	0.00	11.9	11.9	—	98.2	98.2	< 0.005	< 0.005	0.08	99.4
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	19.3	19.3	< 0.005	1.93	1.93	—	60.2	60.2	< 0.005	0.01	0.02	62.8
Hauling	0.02	0.01	0.66	0.16	< 0.005	0.01	140	140	0.01	14.0	14.0	—	491	491	0.01	0.08	0.29	514

3.19. Drilling- All Facilities (2034) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.83	1.83	35.3	107	0.16	0.28	—	0.28	0.28	—	0.28	—	15,061	15,061	0.61	0.12	—	15,113
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.83	1.83	35.3	107	0.16	0.28	—	0.28	0.28	—	0.28	—	15,061	15,061	0.61	0.12	—	15,113
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.31	1.31	25.2	76.3	0.11	0.20	—	0.20	0.20	—	0.20	—	10,758	10,758	0.44	0.09	—	10,795
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.24	0.24	4.60	13.9	0.02	0.04	—	0.04	0.04	—	0.04	—	1,781	1,781	0.07	0.01	—	1,787
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.25	0.22	0.17	3.93	0.00	0.00	926	926	0.00	92.5	92.5	—	900	900	0.01	< 0.005	1.40	903
Vendor	0.03	0.02	0.49	0.21	< 0.005	0.01	150	150	0.01	15.0	15.0	—	495	495	< 0.005	0.07	0.36	516
Hauling	0.15	0.10	4.62	1.21	0.03	0.10	1,090	1,090	0.10	109	109	—	4,075	4,075	0.04	0.64	4.99	4,272
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.21	0.18	0.17	2.20	0.00	0.00	926	926	0.00	92.5	92.5	—	763	763	0.01	0.03	0.04	773
Vendor	0.02	0.02	0.54	0.22	< 0.005	0.01	150	150	0.01	15.0	15.0	—	495	495	< 0.005	0.07	0.01	516
Hauling	0.14	0.09	5.07	1.24	0.03	0.10	1,090	1,090	0.10	109	109	—	4,079	4,079	0.04	0.64	0.13	4,271
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.16	0.14	0.12	2.00	0.00	0.00	653	653	0.00	65.2	65.2	—	585	585	0.01	0.02	0.43	592
Vendor	0.02	0.01	0.38	0.15	< 0.005	0.01	106	106	0.01	10.6	10.6	—	353	353	< 0.005	0.05	0.11	369
Hauling	0.11	0.07	3.56	0.88	0.02	0.07	768	768	0.07	76.8	76.9	—	2,912	2,912	0.03	0.46	1.54	3,051
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.02	0.37	0.00	0.00	119	119	0.00	11.9	11.9	—	96.9	96.9	< 0.005	< 0.005	0.07	98.1
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	19.3	19.3	< 0.005	1.93	1.93	—	58.5	58.5	< 0.005	0.01	0.02	61.0
Hauling	0.02	0.01	0.65	0.16	< 0.005	0.01	140	140	0.01	14.0	14.0	—	482	482	0.01	0.08	0.25	505

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Drilling- All Facilities	Grading	1/1/2025	12/31/2034	5.00	2,608	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Drilling- All Facilities	Generator Sets	Diesel	Tier 4 Final	8.00	24.0	25.0	0.74
Drilling- All Facilities	Pumps	Diesel	Tier 4 Final	2.00	24.0	25.0	0.74
Drilling- All Facilities	Bore/Drill Rigs	Diesel	Tier 4 Final	2.00	24.0	83.0	0.50
Drilling- All Facilities	Forklifts	Diesel	Tier 4 Final	10.0	24.0	82.0	0.20
Drilling- All Facilities	Aerial Lifts	Diesel	Tier 4 Final	2.00	24.0	46.0	0.31
Drilling- All Facilities	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	2.00	24.0	84.0	0.37

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Drilling- All Facilities	—	—	—	—
Drilling- All Facilities	Worker	68.0	18.5	LDA,LDT1,LDT2
Drilling- All Facilities	Vendor	20.0	10.2	HHDT,MHDT
Drilling- All Facilities	Hauling	74.0	20.0	HHDT
Drilling- All Facilities	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Control Strategies Applied	PM10 Reduction	PM2.5 Reduction
Water unpaved roads twice daily	55%	55%
Limit vehicle speeds on unpaved roads to 25 mph	44%	44%
Sweep paved roads once per month	9%	9%

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Drilling- All Facilities	153,472	1,368,972	0.00	0.00	—

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	3	74%	74%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
General Heavy Industry	0.00	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2025	0.00	457	0.03	< 0.005
2026	0.00	457	0.03	< 0.005
2027	0.00	457	0.03	< 0.005
2028	0.00	457	0.03	< 0.005
2029	0.00	457	0.03	< 0.005
2030	0.00	457	0.03	< 0.005
2031	0.00	457	0.03	< 0.005
2032	0.00	457	0.03	< 0.005
2033	0.00	457	0.03	< 0.005
2034	0.00	457	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	32.8	annual days of extreme heat
Extreme Precipitation	0.00	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.19	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A

Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	11.6
AQ-PM	19.1
AQ-DPM	9.09
Drinking Water	30.6
Lead Risk Housing	50.8
Pesticides	90.5
Toxic Releases	7.58
Traffic	3.06
Effect Indicators	—
CleanUp Sites	74.2
Groundwater	77.9
Haz Waste Facilities/Generators	93.2
Impaired Water Bodies	100.0
Solid Waste	86.5
Sensitive Population	—
Asthma	87.6
Cardio-vascular	83.2
Low Birth Weights	26.9
Socioeconomic Factor Indicators	—
Education	82.7
Housing	51.4
Linguistic	88.8
Poverty	94.9
Unemployment	99.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	16.66880534
Employed	7.173104068
Median HI	5.299627871
Education	—
Bachelor's or higher	5.017323239
High school enrollment	16.8741178
Preschool enrollment	68.89516233
Transportation	—
Auto Access	18.40112922
Active commuting	51.10997049
Social	—
2-parent households	13.28114975
Voting	16.79712563
Neighborhood	—
Alcohol availability	70.25535737
Park access	33.85089183
Retail density	4.311561658
Supermarket access	49.58295907
Tree canopy	0.782753753
Housing	—
Homeownership	38.3036058
Housing habitability	30.96368536
Low-inc homeowner severe housing cost burden	26.76761196
Low-inc renter severe housing cost burden	52.89362248

Uncrowded housing	38.58591043
Health Outcomes	—
Insured adults	21.00603105
Arthritis	0.0
Asthma ER Admissions	30.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	41.7
Cognitively Disabled	50.3
Physically Disabled	19.5
Heart Attack ER Admissions	46.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	54.3
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0

Children	14.1
Elderly	42.0
English Speaking	18.7
Foreign-born	65.3
Outdoor Workers	5.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	85.8
Traffic Density	4.9
Traffic Access	23.0
Other Indices	—
Hardship	92.9
Other Decision Support	—
2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	82.0
Healthy Places Index Score for Project Location (b)	11.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Construction: Construction Phases	Drilling phase represents the sum of drilling for 11 geothermal facilities, each requiring a 19-month drilling phase. Overlap would occur.
Construction: Off-Road Equipment	Equipment mix is based on example project for geothermal well drilling. Drilling operations would be conducted 24 hours/day. The Specific Plan has committed to Tier 4 Final engines for construction equipment.
Construction: Trips and VMT	Vendor trucks added based on geothermal project example.
Land Use	Building square footage is based on the expected number of geothermal facilities, based on applicant-provided information. Landscape area is included in other construction runs.

LV Construction - Phase 2 Geothermal Drilling Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	LV Construction - Phase 2 Geothermal Drilling
Construction Start Date	1/1/2035
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	4.80
Location	33.18829759139308, -115.6026869228474
County	Imperial
City	Unincorporated
Air District	Imperial County APCD
Air Basin	Salton Sea
TAZ	5600
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
General Heavy Industry	2,978	1000sqft	68.4	2,977,700	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.14	1.09	20.7	56.1	0.10	0.20	1,189	1,189	0.20	119	119	—	10,612	10,612	0.34	0.48	3.40	10,767
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.10	1.07	21.0	55.3	0.10	0.20	1,189	1,189	0.20	119	119	—	10,547	10,547	0.34	0.48	0.09	10,699
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.79	0.77	15.0	39.7	0.07	0.14	841	841	0.14	84.0	84.1	—	7,553	7,553	0.24	0.34	1.05	7,662
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.14	0.14	2.73	7.25	0.01	0.03	153	153	0.03	15.3	15.4	—	1,250	1,250	0.04	0.06	0.17	1,268

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2035	1.14	1.09	20.7	56.1	0.10	0.20	1,189	1,189	0.20	119	119	—	10,612	10,612	0.34	0.48	3.40	10,767

2036	1.12	1.09	20.6	56.0	0.10	0.20	1,189	1,189	0.20	119	119	—	10,572	10,572	0.33	0.48	2.97	10,726
2037	1.11	1.08	20.6	55.9	0.10	0.20	1,189	1,189	0.20	119	119	—	10,537	10,537	0.33	0.46	2.59	10,685
2038	1.11	1.08	20.6	55.8	0.10	0.20	1,189	1,189	0.20	119	119	—	10,511	10,511	0.33	0.46	2.25	10,658
2039	1.10	1.07	20.6	55.7	0.10	0.20	1,189	1,189	0.20	119	119	—	10,486	10,486	0.33	0.46	1.94	10,633
2040	1.10	1.07	20.6	55.7	0.10	0.20	1,189	1,189	0.20	119	119	—	10,465	10,465	0.33	0.46	1.68	10,612
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2035	1.10	1.07	21.0	55.3	0.10	0.20	1,189	1,189	0.20	119	119	—	10,547	10,547	0.34	0.48	0.09	10,699
2036	1.10	1.07	20.9	55.2	0.10	0.20	1,189	1,189	0.20	119	119	—	10,507	10,507	0.33	0.48	0.08	10,659
2037	1.09	1.06	20.9	55.2	0.10	0.20	1,189	1,189	0.20	119	119	—	10,473	10,473	0.33	0.46	0.07	10,619
2038	1.09	1.06	20.9	55.1	0.10	0.20	1,189	1,189	0.20	119	119	—	10,448	10,448	0.33	0.46	0.06	10,593
2039	1.09	1.06	20.9	55.1	0.10	0.20	1,189	1,189	0.20	119	119	—	10,424	10,424	0.33	0.46	0.05	10,569
2040	1.08	1.04	20.8	55.0	0.10	0.20	1,189	1,189	0.20	119	119	—	10,404	10,404	0.33	0.46	0.04	10,548
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2035	0.79	0.77	15.0	39.7	0.07	0.14	838	838	0.14	83.7	83.9	—	7,553	7,553	0.24	0.34	1.05	7,662
2036	0.79	0.77	15.0	39.7	0.07	0.14	841	841	0.14	84.0	84.1	—	7,544	7,544	0.24	0.34	0.92	7,654
2037	0.79	0.76	14.9	39.6	0.07	0.14	838	838	0.14	83.7	83.9	—	7,499	7,499	0.24	0.33	0.80	7,604
2038	0.78	0.76	14.9	39.5	0.07	0.14	838	838	0.14	83.7	83.9	—	7,481	7,481	0.24	0.33	0.69	7,585
2039	0.78	0.76	14.9	39.5	0.07	0.14	838	838	0.14	83.7	83.9	—	7,464	7,464	0.24	0.33	0.60	7,568
2040	0.78	0.76	14.9	39.6	0.07	0.14	841	841	0.14	84.0	84.1	—	7,469	7,469	0.24	0.33	0.52	7,574
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2035	0.14	0.14	2.73	7.24	0.01	0.03	153	153	0.03	15.3	15.3	—	1,250	1,250	0.04	0.06	0.17	1,268
2036	0.14	0.14	2.73	7.25	0.01	0.03	153	153	0.03	15.3	15.4	—	1,249	1,249	0.04	0.06	0.15	1,267
2037	0.14	0.14	2.72	7.22	0.01	0.03	153	153	0.03	15.3	15.3	—	1,242	1,242	0.04	0.05	0.13	1,259
2038	0.14	0.14	2.71	7.21	0.01	0.03	153	153	0.03	15.3	15.3	—	1,239	1,239	0.04	0.05	0.11	1,256
2039	0.14	0.14	2.71	7.21	0.01	0.03	153	153	0.03	15.3	15.3	—	1,236	1,236	0.04	0.05	0.10	1,253
2040	0.14	0.14	2.71	7.22	0.01	0.03	153	153	0.03	15.3	15.4	—	1,237	1,237	0.04	0.05	0.09	1,254

3. Construction Emissions Details

3.1. Drilling- All Facilities (2035) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.92	0.92	17.7	53.4	0.08	0.14	—	0.14	0.14	—	0.14	—	7,531	7,531	0.31	0.06	—	7,556
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.92	0.92	17.7	53.4	0.08	0.14	—	0.14	0.14	—	0.14	—	7,531	7,531	0.31	0.06	—	7,556
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.66	0.66	12.6	38.2	0.06	0.10	—	0.10	0.10	—	0.10	—	5,379	5,379	0.22	0.04	—	5,397
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.12	2.30	6.96	0.01	0.02	—	0.02	0.02	—	0.02	—	891	891	0.04	0.01	—	894
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.10	0.07	1.84	0.00	0.00	463	463	0.00	46.2	46.2	—	444	444	< 0.005	< 0.005	0.61	446
Vendor	0.01	0.01	0.24	0.10	< 0.005	< 0.005	75.1	75.1	< 0.005	7.51	7.51	—	241	241	< 0.005	0.03	0.14	251
Hauling	0.09	0.06	2.72	0.73	0.02	0.06	651	651	0.06	65.1	65.1	—	2,397	2,397	0.03	0.38	2.64	2,514
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.09	0.09	1.03	0.00	0.00	463	463	0.00	46.2	46.2	—	377	377	< 0.005	< 0.005	0.02	378
Vendor	0.01	0.01	0.26	0.11	< 0.005	< 0.005	75.1	75.1	< 0.005	7.51	7.51	—	241	241	< 0.005	0.03	< 0.005	251
Hauling	0.08	0.06	2.99	0.75	0.02	0.06	651	651	0.06	65.1	65.1	—	2,399	2,399	0.03	0.38	0.07	2,514
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.06	0.93	0.00	0.00	326	326	0.00	32.6	32.6	—	289	289	< 0.005	< 0.005	0.19	290

Vendor	0.01	0.01	0.18	0.07	< 0.005	< 0.005	52.9	52.9	< 0.005	5.29	5.29	—	172	172	< 0.005	0.02	0.04	179
Hauling	0.06	0.04	2.10	0.53	0.01	0.04	459	459	0.04	45.9	45.9	—	1,713	1,713	0.02	0.27	0.82	1,795
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.17	0.00	0.00	59.6	59.6	0.00	5.95	5.95	—	47.8	47.8	< 0.005	< 0.005	0.03	48.0
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	9.66	9.66	< 0.005	0.97	0.97	—	28.5	28.5	< 0.005	< 0.005	0.01	29.7
Hauling	0.01	0.01	0.38	0.10	< 0.005	0.01	83.7	83.7	0.01	8.37	8.38	—	284	284	< 0.005	0.05	0.14	297

3.3. Drilling- All Facilities (2036) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.92	0.92	17.7	53.4	0.08	0.14	—	0.14	0.14	—	0.14	—	7,531	7,531	0.31	0.06	—	7,556
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.92	0.92	17.7	53.4	0.08	0.14	—	0.14	0.14	—	0.14	—	7,531	7,531	0.31	0.06	—	7,556

Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.66	0.66	12.6	38.3	0.06	0.10	—	0.10	0.10	—	0.10	—	5,394	5,394	0.22	0.04	—	5,412
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.12	2.31	6.98	0.01	0.02	—	0.02	0.02	—	0.02	—	893	893	0.04	0.01	—	896
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.10	0.07	1.73	0.00	0.00	463	463	0.00	46.2	46.2	—	440	440	< 0.005	< 0.005	0.53	441
Vendor	0.01	0.01	0.24	0.10	< 0.005	< 0.005	75.1	75.1	< 0.005	7.51	7.51	—	235	235	< 0.005	0.03	0.11	245
Hauling	0.09	0.06	2.68	0.71	0.02	0.06	651	651	0.06	65.1	65.1	—	2,366	2,366	0.03	0.38	2.33	2,483

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.09	0.07	0.97	0.00	0.00	463	463	0.00	46.2	46.2	—	373	373	< 0.005	< 0.005	0.01	374
Vendor	0.01	0.01	0.26	0.10	< 0.005	< 0.005	75.1	75.1	< 0.005	7.51	7.51	—	235	235	< 0.005	0.03	< 0.005	245
Hauling	0.08	0.06	2.95	0.73	0.02	0.06	651	651	0.06	65.1	65.1	—	2,369	2,369	0.02	0.38	0.06	2,483
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.05	0.88	0.00	0.00	327	327	0.00	32.7	32.7	—	287	287	< 0.005	< 0.005	0.16	288
Vendor	0.01	0.01	0.18	0.07	< 0.005	< 0.005	53.1	53.1	< 0.005	5.31	5.31	—	168	168	< 0.005	0.02	0.03	175
Hauling	0.06	0.04	2.07	0.52	0.01	0.04	460	460	0.04	46.0	46.0	—	1,696	1,696	0.02	0.27	0.72	1,778
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.16	0.00	0.00	59.7	59.7	0.00	5.96	5.96	—	47.5	47.5	< 0.005	< 0.005	0.03	47.6
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	9.69	9.69	< 0.005	0.97	0.97	—	27.9	27.9	< 0.005	< 0.005	0.01	29.0
Hauling	0.01	0.01	0.38	0.09	< 0.005	0.01	84.0	84.0	0.01	8.39	8.40	—	281	281	< 0.005	0.05	0.12	294

3.5. Drilling- All Facilities (2037) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.92	0.92	17.7	53.4	0.08	0.14	—	0.14	0.14	—	0.14	—	7,531	7,531	0.31	0.06	—	7,556
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.92	0.92	17.7	53.4	0.08	0.14	—	0.14	0.14	—	0.14	—	7,531	7,531	0.31	0.06	—	7,556
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.66	0.66	12.6	38.2	0.06	0.10	—	0.10	0.10	—	0.10	—	5,379	5,379	0.22	0.04	—	5,397
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.12	2.30	6.96	0.01	0.02	—	0.02	0.02	—	0.02	—	891	891	0.04	0.01	—	894
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.09	0.06	1.64	0.00	0.00	463	463	0.00	46.2	46.2	—	435	435	< 0.005	< 0.005	0.46	437
Vendor	0.01	0.01	0.23	0.10	< 0.005	< 0.005	75.1	75.1	< 0.005	7.51	7.51	—	230	230	< 0.005	0.03	0.08	240
Hauling	0.09	0.06	2.66	0.69	0.02	0.06	651	651	0.06	65.1	65.1	—	2,341	2,341	0.02	0.36	2.04	2,452
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.07	0.91	0.00	0.00	463	463	0.00	46.2	46.2	—	369	369	< 0.005	< 0.005	0.01	370
Vendor	0.01	0.01	0.25	0.10	< 0.005	< 0.005	75.1	75.1	< 0.005	7.51	7.51	—	230	230	< 0.005	0.03	< 0.005	240
Hauling	0.08	0.06	2.93	0.71	0.02	0.06	651	651	0.06	65.1	65.1	—	2,343	2,343	0.02	0.36	0.05	2,452
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.05	0.83	0.00	0.00	326	326	0.00	32.6	32.6	—	283	283	< 0.005	< 0.005	0.14	284
Vendor	0.01	0.01	0.18	0.07	< 0.005	< 0.005	52.9	52.9	< 0.005	5.29	5.29	—	164	164	< 0.005	0.02	0.03	171
Hauling	0.06	0.04	2.05	0.50	0.01	0.04	459	459	0.04	45.9	45.9	—	1,673	1,673	0.02	0.26	0.63	1,751
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.15	0.00	0.00	59.6	59.6	0.00	5.95	5.95	—	46.9	46.9	< 0.005	< 0.005	0.02	47.0
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	9.66	9.66	< 0.005	0.97	0.97	—	27.2	27.2	< 0.005	< 0.005	< 0.005	28.3
Hauling	0.01	0.01	0.37	0.09	< 0.005	0.01	83.7	83.7	0.01	8.37	8.38	—	277	277	< 0.005	0.04	0.10	290

3.7. Drilling- All Facilities (2038) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.92	0.92	17.7	53.4	0.08	0.14	—	0.14	0.14	—	0.14	—	7,531	7,531	0.31	0.06	—	7,556
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.92	0.92	17.7	53.4	0.08	0.14	—	0.14	0.14	—	0.14	—	7,531	7,531	0.31	0.06	—	7,556
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.66	0.66	12.6	38.2	0.06	0.10	—	0.10	0.10	—	0.10	—	5,379	5,379	0.22	0.04	—	5,397
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.12	2.30	6.96	0.01	0.02	—	0.02	0.02	—	0.02	—	891	891	0.04	0.01	—	894

Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.09	0.06	1.58	0.00	0.00	463	463	0.00	46.2	46.2	—	433	433	< 0.005	< 0.005	0.40	434
Vendor	0.01	0.01	0.23	0.10	< 0.005	< 0.005	75.1	75.1	< 0.005	7.51	7.51	—	225	225	< 0.005	0.03	0.06	235
Hauling	0.09	0.06	2.66	0.70	0.02	0.06	651	651	0.06	65.1	65.1	—	2,322	2,322	0.02	0.36	1.78	2,433
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.07	0.88	0.00	0.00	463	463	0.00	46.2	46.2	—	367	367	< 0.005	< 0.005	0.01	368
Vendor	0.01	0.01	0.25	0.10	< 0.005	< 0.005	75.1	75.1	< 0.005	7.51	7.51	—	226	226	< 0.005	0.03	< 0.005	235
Hauling	0.08	0.06	2.91	0.72	0.02	0.06	651	651	0.06	65.1	65.1	—	2,324	2,324	0.02	0.36	0.05	2,433
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.04	0.80	0.00	0.00	326	326	0.00	32.6	32.6	—	282	282	< 0.005	< 0.005	0.12	282
Vendor	0.01	0.01	0.17	0.07	< 0.005	< 0.005	52.9	52.9	< 0.005	5.29	5.29	—	161	161	< 0.005	0.02	0.02	168
Hauling	0.06	0.04	2.04	0.50	0.01	0.04	459	459	0.04	45.9	45.9	—	1,659	1,659	0.02	0.26	0.55	1,738
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.15	0.00	0.00	59.6	59.6	0.00	5.95	5.95	—	46.6	46.6	< 0.005	< 0.005	0.02	46.7
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	9.66	9.66	< 0.005	0.97	0.97	—	26.7	26.7	< 0.005	< 0.005	< 0.005	27.8
Hauling	0.01	0.01	0.37	0.09	< 0.005	0.01	83.7	83.7	0.01	8.37	8.38	—	275	275	< 0.005	0.04	0.09	288

3.9. Drilling- All Facilities (2039) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.92	0.92	17.7	53.4	0.08	0.14	—	0.14	0.14	—	0.14	—	7,531	7,531	0.31	0.06	—	7,556
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.92	0.92	17.7	53.4	0.08	0.14	—	0.14	0.14	—	0.14	—	7,531	7,531	0.31	0.06	—	7,556
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.66	0.66	12.6	38.2	0.06	0.10	—	0.10	0.10	—	0.10	—	5,379	5,379	0.22	0.04	—	5,397
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.12	2.30	6.96	0.01	0.02	—	0.02	0.02	—	0.02	—	891	891	0.04	0.01	—	894
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.06	1.50	0.00	0.00	463	463	0.00	46.2	46.2	—	430	430	< 0.005	< 0.005	0.34	431
Vendor	0.01	0.01	0.23	0.10	< 0.005	< 0.005	75.1	75.1	< 0.005	7.51	7.51	—	221	221	< 0.005	0.03	0.05	230
Hauling	0.09	0.06	2.64	0.70	0.02	0.06	651	651	0.06	65.1	65.1	—	2,305	2,305	0.02	0.36	1.55	2,415
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.06	0.84	0.00	0.00	463	463	0.00	46.2	46.2	—	364	364	< 0.005	< 0.005	0.01	365
Vendor	0.01	0.01	0.25	0.10	< 0.005	< 0.005	75.1	75.1	< 0.005	7.51	7.51	—	221	221	< 0.005	0.03	< 0.005	231
Hauling	0.08	0.06	2.89	0.72	0.02	0.06	651	651	0.06	65.1	65.1	—	2,307	2,307	0.02	0.36	0.04	2,416
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.04	0.76	0.00	0.00	326	326	0.00	32.6	32.6	—	279	279	< 0.005	< 0.005	0.11	280
Vendor	0.01	0.01	0.17	0.07	< 0.005	< 0.005	52.9	52.9	< 0.005	5.29	5.29	—	158	158	< 0.005	0.02	0.01	165
Hauling	0.06	0.04	2.03	0.51	0.01	0.04	459	459	0.04	45.9	45.9	—	1,647	1,647	0.02	0.26	0.48	1,725
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.14	0.00	0.00	59.6	59.6	0.00	5.95	5.95	—	46.3	46.3	< 0.005	< 0.005	0.02	46.4

Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	9.66	9.66	< 0.005	0.97	0.97	—	26.2	26.2	< 0.005	< 0.005	< 0.005	27.3
Hauling	0.01	0.01	0.37	0.09	< 0.005	0.01	83.7	83.7	0.01	8.37	8.38	—	273	273	< 0.005	0.04	0.08	286

3.11. Drilling- All Facilities (2040) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.92	0.92	17.7	53.4	0.08	0.14	—	0.14	0.14	—	0.14	—	7,531	7,531	0.31	0.06	—	7,556
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.92	0.92	17.7	53.4	0.08	0.14	—	0.14	0.14	—	0.14	—	7,531	7,531	0.31	0.06	—	7,556
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.66	0.66	12.6	38.3	0.06	0.10	—	0.10	0.10	—	0.10	—	5,394	5,394	0.22	0.04	—	5,412
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.12	0.12	2.31	6.98	0.01	0.02	—	0.02	0.02	—	0.02	—	893	893	0.04	0.01	—	896
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.06	1.46	0.00	0.00	463	463	0.00	46.2	46.2	—	426	426	< 0.005	< 0.005	0.30	428
Vendor	0.01	0.01	0.22	0.09	< 0.005	< 0.005	75.1	75.1	< 0.005	7.51	7.51	—	217	217	< 0.005	0.03	0.04	227
Hauling	0.09	0.06	2.62	0.68	0.02	0.06	651	651	0.06	65.1	65.1	—	2,291	2,291	0.02	0.36	1.35	2,401
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.06	0.81	0.00	0.00	463	463	0.00	46.2	46.2	—	362	362	< 0.005	< 0.005	0.01	363
Vendor	0.01	0.01	0.24	0.10	< 0.005	< 0.005	75.1	75.1	< 0.005	7.51	7.51	—	218	218	< 0.005	0.03	< 0.005	227
Hauling	0.08	0.06	2.87	0.70	0.02	0.06	651	651	0.06	65.1	65.1	—	2,293	2,293	0.02	0.36	0.03	2,402
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.04	0.74	0.00	0.00	327	327	0.00	32.7	32.7	—	278	278	< 0.005	< 0.005	0.09	279

Vendor	0.01	0.01	0.17	0.07	< 0.005	< 0.005	53.1	53.1	< 0.005	5.31	5.31	—	156	156	< 0.005	0.02	0.01	163
Hauling	0.06	0.04	2.02	0.49	0.01	0.04	460	460	0.04	46.0	46.0	—	1,642	1,642	0.02	0.26	0.42	1,720
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.14	0.00	0.00	59.7	59.7	0.00	5.96	5.96	—	46.1	46.1	< 0.005	< 0.005	0.02	46.2
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	9.69	9.69	< 0.005	0.97	0.97	—	25.8	25.8	< 0.005	< 0.005	< 0.005	26.9
Hauling	0.01	0.01	0.37	0.09	< 0.005	0.01	84.0	84.0	0.01	8.39	8.40	—	272	272	< 0.005	0.04	0.07	285

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Drilling- All Facilities	Grading	1/1/2035	12/31/2040	5.00	1,566	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Drilling- All Facilities	Generator Sets	Diesel	Tier 4 Final	4.00	24.0	25.0	0.74

Drilling- All Facilities	Pumps	Diesel	Tier 4 Final	1.00	24.0	25.0	0.74
Drilling- All Facilities	Bore/Drill Rigs	Diesel	Tier 4 Final	1.00	24.0	83.0	0.50
Drilling- All Facilities	Forklifts	Diesel	Tier 4 Final	5.00	24.0	82.0	0.20
Drilling- All Facilities	Aerial Lifts	Diesel	Tier 4 Final	1.00	24.0	46.0	0.31
Drilling- All Facilities	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	24.0	84.0	0.37

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Drilling- All Facilities	—	—	—	—
Drilling- All Facilities	Worker	34.0	18.5	LDA,LDT1,LDT2
Drilling- All Facilities	Vendor	10.0	10.2	HHDT,MHDT
Drilling- All Facilities	Hauling	44.2	20.0	HHDT
Drilling- All Facilities	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Control Strategies Applied	PM10 Reduction	PM2.5 Reduction
Water unpaved roads twice daily	55%	55%
Limit vehicle speeds on unpaved roads to 25 mph	44%	44%
Sweep paved roads once per month	9%	9%

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Drilling- All Facilities	55,808	497,808	0.00	0.00	—

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	3	74%	74%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
General Heavy Industry	0.00	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2035	0.00	457	0.03	< 0.005
2036	0.00	457	0.03	< 0.005
2037	0.00	457	0.03	< 0.005
2038	0.00	457	0.03	< 0.005
2039	0.00	457	0.03	< 0.005
2040	0.00	457	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	32.8	annual days of extreme heat
Extreme Precipitation	0.00	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.19	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A

Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	11.6
AQ-PM	19.1
AQ-DPM	9.09
Drinking Water	30.6
Lead Risk Housing	50.8
Pesticides	90.5
Toxic Releases	7.58
Traffic	3.06
Effect Indicators	—
CleanUp Sites	74.2
Groundwater	77.9
Haz Waste Facilities/Generators	93.2
Impaired Water Bodies	100.0
Solid Waste	86.5

Sensitive Population	—
Asthma	87.6
Cardio-vascular	83.2
Low Birth Weights	26.9
Socioeconomic Factor Indicators	—
Education	82.7
Housing	51.4
Linguistic	88.8
Poverty	94.9
Unemployment	99.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	16.66880534
Employed	7.173104068
Median HI	5.299627871
Education	—
Bachelor's or higher	5.017323239
High school enrollment	16.8741178
Preschool enrollment	68.89516233
Transportation	—
Auto Access	18.40112922
Active commuting	51.10997049
Social	—
2-parent households	13.28114975
Voting	16.79712563

Neighborhood	—
Alcohol availability	70.25535737
Park access	33.85089183
Retail density	4.311561658
Supermarket access	49.58295907
Tree canopy	0.782753753
Housing	—
Homeownership	38.3036058
Housing habitability	30.96368536
Low-inc homeowner severe housing cost burden	26.76761196
Low-inc renter severe housing cost burden	52.89362248
Uncrowded housing	38.58591043
Health Outcomes	—
Insured adults	21.00603105
Arthritis	0.0
Asthma ER Admissions	30.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	41.7
Cognitively Disabled	50.3
Physically Disabled	19.5
Heart Attack ER Admissions	46.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0

Obesity	0.0
Pedestrian Injuries	54.3
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	14.1
Elderly	42.0
English Speaking	18.7
Foreign-born	65.3
Outdoor Workers	5.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	85.8
Traffic Density	4.9
Traffic Access	23.0
Other Indices	—
Hardship	92.9
Other Decision Support	—
2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	82.0

Healthy Places Index Score for Project Location (b)	11.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Construction: Construction Phases	Drilling phase represents the sum of drilling for 4 geothermal facilities, each requiring a 19-month drilling phase.
Construction: Off-Road Equipment	Equipment mix is based on example project for geothermal well drilling. Drilling operations would be conducted 24 hours/day. The Specific Plan has committed to Tier 4 Final engines for construction equipment.
Construction: Trips and VMT	Vendor trucks added based on geothermal project example.

LV Construction - Phase 3 Geothermal Drilling Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	LV Construction - Phase 3 Geothermal Drilling
Construction Start Date	1/1/2045
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	4.80
Location	33.18829759139308, -115.6026869228474
County	Imperial
City	Unincorporated
Air District	Imperial County APCD
Air Basin	Salton Sea
TAZ	5600
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
General Heavy Industry	2,099	1000sqft	48.2	2,099,100	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.09	1.04	20.5	55.5	0.10	0.20	1,190	1,190	0.20	119	119	—	10,407	10,407	0.31	0.46	0.80	10,552
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.06	1.03	20.8	54.9	0.10	0.20	1,190	1,190	0.20	119	119	—	10,347	10,347	0.31	0.46	0.02	10,491
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.76	0.74	14.8	39.4	0.07	0.14	839	839	0.14	83.8	83.9	—	7,408	7,408	0.22	0.33	0.25	7,511
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.14	0.13	2.70	7.19	0.01	0.03	153	153	0.03	15.3	15.3	—	1,226	1,226	0.04	0.05	0.04	1,244

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2045	1.09	1.04	20.5	55.5	0.10	0.20	1,190	1,190	0.20	119	119	—	10,407	10,407	0.31	0.46	0.80	10,552

2046	1.09	1.04	20.5	55.5	0.10	0.20	1,190	1,190	0.20	119	119	—	10,400	10,400	0.31	0.46	0.69	10,545
2047	1.06	1.04	20.5	55.5	0.10	0.20	1,190	1,190	0.20	119	119	—	10,395	10,395	0.31	0.46	0.59	10,539
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2045	1.06	1.03	20.8	54.9	0.10	0.20	1,190	1,190	0.20	119	119	—	10,347	10,347	0.31	0.46	0.02	10,491
2046	1.06	1.03	20.8	54.9	0.10	0.20	1,190	1,190	0.20	119	119	—	10,340	10,340	0.31	0.46	0.02	10,485
2047	1.04	1.03	20.8	54.9	0.10	0.20	1,190	1,190	0.20	119	119	—	10,335	10,335	0.31	0.46	0.02	10,479
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2045	0.76	0.74	14.8	39.4	0.07	0.14	839	839	0.14	83.8	83.9	—	7,408	7,408	0.22	0.33	0.25	7,511
2046	0.76	0.74	14.8	39.4	0.07	0.14	839	839	0.14	83.8	83.9	—	7,403	7,403	0.22	0.33	0.21	7,506
2047	0.74	0.74	14.8	39.4	0.07	0.14	839	839	0.14	83.8	83.9	—	7,399	7,399	0.22	0.33	0.18	7,502
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2045	0.14	0.13	2.70	7.19	0.01	0.03	153	153	0.03	15.3	15.3	—	1,226	1,226	0.04	0.05	0.04	1,244
2046	0.14	0.13	2.70	7.18	0.01	0.03	153	153	0.03	15.3	15.3	—	1,226	1,226	0.04	0.05	0.04	1,243
2047	0.14	0.13	2.70	7.18	0.01	0.03	153	153	0.03	15.3	15.3	—	1,225	1,225	0.04	0.05	0.03	1,242

3. Construction Emissions Details

3.1. Drilling- All Facilities (2045) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.92	0.92	17.7	53.4	0.08	0.14	—	0.14	0.14	—	0.14	—	7,531	7,531	0.31	0.06	—	7,556

Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.92	0.92	17.7	53.4	0.08	0.14	—	0.14	0.14	—	0.14	—	7,531	7,531	0.31	0.06	—	7,556
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.66	0.66	12.6	38.2	0.06	0.10	—	0.10	0.10	—	0.10	—	5,379	5,379	0.22	0.04	—	5,397
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.12	2.30	6.96	0.01	0.02	—	0.02	0.02	—	0.02	—	891	891	0.04	0.01	—	894

Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.05	0.04	1.27	0.00	0.00	463	463	0.00	46.2	46.2	—	416	416	< 0.005	< 0.005	0.13	417
Vendor	0.01	0.01	0.21	0.09	< 0.005	< 0.005	75.1	75.1	< 0.005	7.51	7.51	—	205	205	< 0.005	0.03	0.01	214
Hauling	0.09	0.06	2.58	0.69	0.02	0.06	652	652	0.06	65.1	65.2	—	2,255	2,255	< 0.005	0.36	0.66	2,365
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.04	0.70	0.00	0.00	463	463	0.00	46.2	46.2	—	353	353	< 0.005	< 0.005	< 0.005	354
Vendor	0.01	0.01	0.23	0.09	< 0.005	< 0.005	75.1	75.1	< 0.005	7.51	7.51	—	205	205	< 0.005	0.03	< 0.005	214
Hauling	0.08	0.06	2.83	0.71	0.02	0.06	652	652	0.06	65.1	65.2	—	2,258	2,258	< 0.005	0.36	0.02	2,366
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.65	0.00	0.00	326	326	0.00	32.6	32.6	—	271	271	< 0.005	< 0.005	0.04	271
Vendor	0.01	0.01	0.16	0.07	< 0.005	< 0.005	52.9	52.9	< 0.005	5.29	5.29	—	146	146	< 0.005	0.02	< 0.005	153
Hauling	0.06	0.04	1.99	0.50	0.01	0.04	459	459	0.04	45.9	46.0	—	1,612	1,612	< 0.005	0.26	0.20	1,689
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.12	0.00	0.00	59.6	59.6	0.00	5.95	5.95	—	44.8	44.8	< 0.005	< 0.005	0.01	44.9
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	9.66	9.66	< 0.005	0.97	0.97	—	24.2	24.2	< 0.005	< 0.005	< 0.005	25.3
Hauling	0.01	0.01	0.36	0.09	< 0.005	0.01	83.8	83.8	0.01	8.38	8.39	—	267	267	< 0.005	0.04	0.03	280

3.3. Drilling- All Facilities (2046) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.92	0.92	17.7	53.4	0.08	0.14	—	0.14	0.14	—	0.14	—	7,531	7,531	0.31	0.06	—	7,556
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.92	0.92	17.7	53.4	0.08	0.14	—	0.14	0.14	—	0.14	—	7,531	7,531	0.31	0.06	—	7,556
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.66	0.66	12.6	38.2	0.06	0.10	—	0.10	0.10	—	0.10	—	5,379	5,379	0.22	0.04	—	5,397
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.12	2.30	6.96	0.01	0.02	—	0.02	0.02	—	0.02	—	891	891	0.04	0.01	—	894
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.05	0.04	1.27	0.00	0.00	463	463	0.00	46.2	46.2	—	414	414	< 0.005	< 0.005	0.11	415
Vendor	0.01	0.01	0.21	0.09	< 0.005	< 0.005	75.1	75.1	< 0.005	7.51	7.51	—	203	203	< 0.005	0.03	< 0.005	213
Hauling	0.09	0.06	2.56	0.70	0.02	0.06	652	652	0.06	65.1	65.2	—	2,252	2,252	< 0.005	0.36	0.57	2,361
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.04	0.70	0.00	0.00	463	463	0.00	46.2	46.2	—	352	352	< 0.005	< 0.005	< 0.005	353
Vendor	0.01	0.01	0.23	0.09	< 0.005	< 0.005	75.1	75.1	< 0.005	7.51	7.51	—	204	204	< 0.005	0.03	< 0.005	213
Hauling	0.08	0.06	2.83	0.72	0.02	0.06	652	652	0.06	65.1	65.2	—	2,254	2,254	< 0.005	0.36	0.01	2,363
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.64	0.00	0.00	326	326	0.00	32.6	32.6	—	270	270	< 0.005	< 0.005	0.03	270
Vendor	0.01	0.01	0.16	0.07	< 0.005	< 0.005	52.9	52.9	< 0.005	5.29	5.29	—	145	145	< 0.005	0.02	< 0.005	152
Hauling	0.06	0.04	1.99	0.50	0.01	0.04	459	459	0.04	45.9	46.0	—	1,609	1,609	< 0.005	0.26	0.18	1,687
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.12	0.00	0.00	59.6	59.6	0.00	5.95	5.95	—	44.7	44.7	< 0.005	< 0.005	0.01	44.8

Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	9.66	9.66	< 0.005	0.97	0.97	—	24.1	24.1	< 0.005	< 0.005	< 0.005	25.1
Hauling	0.01	0.01	0.36	0.09	< 0.005	0.01	83.8	83.8	0.01	8.38	8.39	—	266	266	< 0.005	0.04	0.03	279

3.5. Drilling- All Facilities (2047) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.92	0.92	17.7	53.4	0.08	0.14	—	0.14	0.14	—	0.14	—	7,531	7,531	0.31	0.06	—	7,556
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.92	0.92	17.7	53.4	0.08	0.14	—	0.14	0.14	—	0.14	—	7,531	7,531	0.31	0.06	—	7,556
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.66	0.66	12.6	38.2	0.06	0.10	—	0.10	0.10	—	0.10	—	5,379	5,379	0.22	0.04	—	5,397
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.12	0.12	2.30	6.96	0.01	0.02	—	0.02	0.02	—	0.02	—	891	891	0.04	0.01	—	894
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.05	0.04	1.26	0.00	0.00	463	463	0.00	46.2	46.2	—	413	413	< 0.005	< 0.005	0.10	414
Vendor	0.01	0.01	0.21	0.09	< 0.005	< 0.005	75.1	75.1	< 0.005	7.51	7.51	—	202	202	< 0.005	0.03	< 0.005	210
Hauling	0.07	0.06	2.56	0.70	0.02	0.06	652	652	0.06	65.1	65.2	—	2,249	2,249	< 0.005	0.36	0.50	2,358
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.04	0.70	0.00	0.00	463	463	0.00	46.2	46.2	—	351	351	< 0.005	< 0.005	< 0.005	352
Vendor	0.01	0.01	0.23	0.09	< 0.005	< 0.005	75.1	75.1	< 0.005	7.51	7.51	—	202	202	< 0.005	0.03	< 0.005	211
Hauling	0.07	0.06	2.83	0.72	0.02	0.06	652	652	0.06	65.1	65.2	—	2,251	2,251	< 0.005	0.36	0.01	2,360
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.64	0.00	0.00	326	326	0.00	32.6	32.6	—	269	269	< 0.005	< 0.005	0.03	270

Vendor	0.01	0.01	0.16	0.07	< 0.005	< 0.005	52.9	52.9	< 0.005	5.29	5.29	—	144	144	< 0.005	0.02	< 0.005	150
Hauling	0.05	0.04	1.99	0.50	0.01	0.04	459	459	0.04	45.9	46.0	—	1,607	1,607	< 0.005	0.26	0.15	1,685
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.12	0.00	0.00	59.6	59.6	0.00	5.95	5.95	—	44.5	44.5	< 0.005	< 0.005	< 0.005	44.6
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	9.66	9.66	< 0.005	0.97	0.97	—	23.9	23.9	< 0.005	< 0.005	< 0.005	24.9
Hauling	0.01	0.01	0.36	0.09	< 0.005	0.01	83.8	83.8	0.01	8.38	8.39	—	266	266	< 0.005	0.04	0.03	279

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Drilling- All Facilities	Grading	1/1/2045	12/31/2047	5.00	782	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Drilling- All Facilities	Generator Sets	Diesel	Tier 4 Final	4.00	24.0	25.0	0.74

Drilling- All Facilities	Pumps	Diesel	Tier 4 Final	1.00	24.0	25.0	0.74
Drilling- All Facilities	Bore/Drill Rigs	Diesel	Tier 4 Final	1.00	24.0	83.0	0.50
Drilling- All Facilities	Forklifts	Diesel	Tier 4 Final	5.00	24.0	82.0	0.20
Drilling- All Facilities	Aerial Lifts	Diesel	Tier 4 Final	1.00	24.0	46.0	0.31
Drilling- All Facilities	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	24.0	84.0	0.37

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Drilling- All Facilities	—	—	—	—
Drilling- All Facilities	Worker	34.0	18.5	LDA,LDT1,LDT2
Drilling- All Facilities	Vendor	10.0	10.2	HHDT,MHDT
Drilling- All Facilities	Hauling	44.2	20.0	HHDT
Drilling- All Facilities	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Control Strategies Applied	PM10 Reduction	PM2.5 Reduction
Water unpaved roads twice daily	55%	55%
Limit vehicle speeds on unpaved roads to 25 mph	44%	44%
Sweep paved roads once per month	9%	9%

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Drilling- All Facilities	27,904	248,904	0.00	0.00	—

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	3	74%	74%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
General Heavy Industry	0.00	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2045	0.00	457	0.03	< 0.005
2046	0.00	457	0.03	< 0.005
2047	0.00	457	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	32.8	annual days of extreme heat
Extreme Precipitation	0.00	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.19	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	11.6
AQ-PM	19.1
AQ-DPM	9.09
Drinking Water	30.6
Lead Risk Housing	50.8
Pesticides	90.5
Toxic Releases	7.58
Traffic	3.06
Effect Indicators	—
CleanUp Sites	74.2
Groundwater	77.9
Haz Waste Facilities/Generators	93.2
Impaired Water Bodies	100.0
Solid Waste	86.5
Sensitive Population	—
Asthma	87.6

Cardio-vascular	83.2
Low Birth Weights	26.9
Socioeconomic Factor Indicators	—
Education	82.7
Housing	51.4
Linguistic	88.8
Poverty	94.9
Unemployment	99.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	16.66880534
Employed	7.173104068
Median HI	5.299627871
Education	—
Bachelor's or higher	5.017323239
High school enrollment	16.8741178
Preschool enrollment	68.89516233
Transportation	—
Auto Access	18.40112922
Active commuting	51.10997049
Social	—
2-parent households	13.28114975
Voting	16.79712563
Neighborhood	—
Alcohol availability	70.25535737

Park access	33.85089183
Retail density	4.311561658
Supermarket access	49.58295907
Tree canopy	0.782753753
Housing	—
Homeownership	38.3036058
Housing habitability	30.96368536
Low-inc homeowner severe housing cost burden	26.76761196
Low-inc renter severe housing cost burden	52.89362248
Uncrowded housing	38.58591043
Health Outcomes	—
Insured adults	21.00603105
Arthritis	0.0
Asthma ER Admissions	30.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	41.7
Cognitively Disabled	50.3
Physically Disabled	19.5
Heart Attack ER Admissions	46.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	54.3

Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	14.1
Elderly	42.0
English Speaking	18.7
Foreign-born	65.3
Outdoor Workers	5.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	85.8
Traffic Density	4.9
Traffic Access	23.0
Other Indices	—
Hardship	92.9
Other Decision Support	—
2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	82.0
Healthy Places Index Score for Project Location (b)	11.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes

Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Construction: Construction Phases	Drilling phase represents period of construction for 2 geothermal facilities which would be constructed during Phase 3, each requiring a 19-month drilling phase.
Construction: Off-Road Equipment	Equipment mix is based on example project for geothermal well drilling. Drilling operations would be conducted 24 hours/day. The Specific Plan has committed to Tier 4 Final engines for construction equipment.
Construction: Trips and VMT	Vendor trucks added based on geothermal project example. An estimated 17 workers would be present on the project site at all times.
Land Use	—

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Lithium Valley SP Construction - Roadways + Infrastructure - Phase 1 (2025-2034)
Construction Start Date	1/1/2025
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	4.80
Location	33.18829759139308, -115.6026869228474
County	Imperial
City	Unincorporated
Air District	Imperial County APCD
Air Basin	Salton Sea
TAZ	5600
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Road Construction	13.8	Mile	174	0.00	0.00	—	—	—
Road Widening	20.3	Mile	176	0.00	0.00	—	—	—

Bridge/Overpass Construction	0.10	Mile	1.26	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	17.9	17.7	26.2	191	0.26	0.53	4,357	4,357	0.53	435	435	—	32,741	32,741	1.30	0.88	16.0	32,933
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	17.7	17.6	26.5	177	0.26	0.53	4,357	4,357	0.53	435	435	—	32,068	32,068	1.31	0.97	0.42	32,244
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	12.7	12.5	18.9	130	0.19	0.38	3,071	3,072	0.38	307	307	—	23,051	23,051	0.93	0.69	4.95	23,182
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.31	2.29	3.44	23.7	0.03	0.07	561	561	0.07	56.0	56.0	—	3,816	3,816	0.15	0.11	0.82	3,838

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	1.67	1.48	7.09	34.9	0.03	0.07	2,975	2,975	0.07	297	297	—	6,536	6,536	0.20	0.40	14.4	6,676
2026	4.70	4.55	26.2	191	0.26	0.53	4,105	4,105	0.53	410	410	—	32,741	32,741	1.30	0.48	16.0	32,933
2027	4.60	4.46	26.0	188	0.26	0.53	4,105	4,105	0.53	410	410	—	32,646	32,646	1.30	0.48	14.6	32,836
2028	4.51	4.25	25.8	186	0.26	0.53	4,105	4,105	0.53	410	410	—	32,546	32,546	1.29	0.47	13.2	32,733
2029	4.31	4.16	25.7	184	0.26	0.53	4,105	4,105	0.53	410	410	—	32,446	32,446	1.29	0.47	11.9	32,631
2030	4.24	4.09	25.5	182	0.26	0.53	4,105	4,105	0.53	410	410	—	32,358	32,358	1.17	0.46	10.6	32,535
2031	3.29	3.17	20.3	135	0.20	0.40	3,586	3,586	0.40	358	358	—	24,414	24,414	0.86	0.39	8.42	24,559
2032	3.12	3.11	20.2	134	0.20	0.40	3,586	3,586	0.40	358	358	—	24,345	24,345	0.86	0.38	7.48	24,488
2033	17.9	17.7	20.0	133	0.20	0.40	4,357	4,357	0.40	435	435	—	24,286	24,286	0.86	0.88	12.2	24,397
2034	17.8	17.7	12.4	47.1	0.09	0.21	4,357	4,357	0.21	435	435	—	12,847	12,847	0.27	0.88	10.8	13,127
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	1.33	1.21	7.53	25.3	0.03	0.07	2,975	2,975	0.07	297	297	—	6,088	6,088	0.21	0.40	0.37	6,214
2026	4.33	4.17	26.5	177	0.26	0.53	4,105	4,105	0.53	410	410	—	32,068	32,068	1.31	0.48	0.42	32,244
2027	4.15	4.00	26.3	176	0.26	0.53	4,105	4,105	0.53	410	410	—	31,986	31,986	1.31	0.48	0.38	32,163
2028	4.09	3.94	26.2	175	0.26	0.53	4,105	4,105	0.53	410	410	—	31,899	31,899	1.19	0.48	0.34	32,071
2029	4.04	3.89	25.9	173	0.26	0.53	4,105	4,105	0.53	410	410	—	31,813	31,813	1.18	0.47	0.31	31,982
2030	3.86	3.84	25.7	172	0.26	0.53	4,105	4,105	0.53	410	410	—	31,738	31,738	1.18	0.46	0.28	31,905
2031	3.00	2.97	20.5	127	0.20	0.40	3,586	3,586	0.40	358	358	—	23,886	23,886	0.87	0.39	0.22	24,023
2032	2.95	2.82	20.3	127	0.20	0.40	3,586	3,586	0.40	358	358	—	23,826	23,826	0.87	0.38	0.19	23,962
2033	17.7	17.6	20.2	126	0.20	0.40	4,357	4,357	0.40	435	435	—	23,775	23,775	0.86	0.97	0.32	23,910
2034	17.7	17.5	13.0	41.7	0.09	0.21	4,357	4,357	0.21	435	435	—	12,417	12,417	0.27	0.97	0.28	12,712
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	1.06	0.92	5.29	20.4	0.02	0.05	2,097	2,097	0.05	209	209	—	4,479	4,479	0.15	0.29	4.46	4,573
2026	3.16	3.05	18.9	130	0.19	0.38	2,891	2,892	0.38	289	289	—	23,051	23,051	0.93	0.34	4.95	23,182

2027	3.12	3.01	18.7	129	0.19	0.38	2,893	2,894	0.38	289	289	—	23,040	23,040	0.93	0.34	4.50	23,169
2028	2.99	2.89	18.6	128	0.19	0.38	2,901	2,902	0.38	290	290	—	23,037	23,037	0.93	0.34	4.08	23,165
2029	2.94	2.83	18.5	126	0.19	0.38	2,893	2,894	0.38	289	289	—	22,909	22,909	0.84	0.33	3.66	23,033
2030	2.59	2.49	16.5	110	0.16	0.33	2,711	2,711	0.33	271	271	—	20,068	20,068	0.73	0.30	3.09	20,180
2031	2.18	2.16	14.6	92.8	0.14	0.29	2,528	2,528	0.29	252	253	—	17,216	17,216	0.62	0.28	2.59	17,316
2032	2.14	2.05	14.6	92.4	0.14	0.29	2,534	2,535	0.29	253	253	—	17,218	17,218	0.62	0.28	2.31	17,317
2033	7.42	7.32	11.9	61.6	0.10	0.22	2,800	2,800	0.22	280	280	—	13,101	13,101	0.41	0.48	2.90	13,257
2034	12.7	12.5	9.18	31.1	0.06	0.15	3,071	3,072	0.15	307	307	—	8,995	8,995	0.19	0.69	3.33	9,209
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.19	0.17	0.97	3.73	< 0.005	0.01	383	383	0.01	38.2	38.2	—	742	742	0.02	0.05	0.74	757
2026	0.58	0.56	3.44	23.7	0.03	0.07	528	528	0.07	52.7	52.8	—	3,816	3,816	0.15	0.06	0.82	3,838
2027	0.57	0.55	3.41	23.5	0.03	0.07	528	528	0.07	52.7	52.8	—	3,815	3,815	0.15	0.06	0.74	3,836
2028	0.55	0.53	3.40	23.3	0.03	0.07	530	530	0.07	52.9	52.9	—	3,814	3,814	0.15	0.06	0.68	3,835
2029	0.54	0.52	3.37	23.1	0.03	0.07	528	528	0.07	52.7	52.8	—	3,793	3,793	0.14	0.06	0.61	3,813
2030	0.47	0.45	3.02	20.0	0.03	0.06	495	495	0.06	49.4	49.5	—	3,322	3,322	0.12	0.05	0.51	3,341
2031	0.40	0.39	2.67	16.9	0.03	0.05	461	461	0.05	46.1	46.1	—	2,850	2,850	0.10	0.05	0.43	2,867
2032	0.39	0.37	2.66	16.9	0.03	0.05	463	463	0.05	46.2	46.2	—	2,851	2,851	0.10	0.05	0.38	2,867
2033	1.35	1.34	2.16	11.2	0.02	0.04	511	511	0.04	51.0	51.1	—	2,169	2,169	0.07	0.08	0.48	2,195
2034	2.31	2.29	1.67	5.68	0.01	0.03	561	561	0.03	56.0	56.0	—	1,489	1,489	0.03	0.11	0.55	1,525

3. Construction Emissions Details

3.1. Linear, Grubbing & Land Clearing (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.21	0.21	3.83	12.3	0.02	0.03	—	0.03	0.03	—	0.03	—	1,754	1,754	0.07	0.01	—	1,760
Dust From Material Movement	—	—	—	—	—	—	0.42	0.42	—	0.05	0.05	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.21	0.21	3.83	12.3	0.02	0.03	—	0.03	0.03	—	0.03	—	1,754	1,754	0.07	0.01	—	1,760
Dust From Material Movement	—	—	—	—	—	—	0.42	0.42	—	0.05	0.05	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.15	2.74	8.76	0.01	0.02	—	0.02	0.02	—	0.02	—	1,253	1,253	0.05	0.01	—	1,257
Dust From Material Movement	—	—	—	—	—	—	0.30	0.30	—	0.03	0.03	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.50	1.60	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	207	207	0.01	< 0.005	—	208

Dust From Material Movement	—	—	—	—	—	—	0.05	0.05	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.40	1.23	1.16	22.1	0.00	0.00	2,561	2,561	0.00	256	256	—	2,896	2,896	0.11	0.09	10.2	2,937
Vendor	0.01	0.01	0.28	0.13	< 0.005	< 0.005	60.1	60.1	< 0.005	6.00	6.01	—	252	252	< 0.005	0.03	0.69	263
Hauling	0.05	0.03	1.82	0.46	0.01	0.03	354	354	0.03	35.3	35.4	—	1,630	1,630	0.02	0.26	3.53	1,712
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.07	0.96	1.39	12.5	0.00	0.00	2,561	2,561	0.00	256	256	—	2,446	2,446	0.12	0.09	0.26	2,478
Vendor	0.01	0.01	0.31	0.13	< 0.005	< 0.005	60.1	60.1	< 0.005	6.00	6.01	—	252	252	< 0.005	0.03	0.02	262
Hauling	0.05	0.03	2.00	0.47	0.01	0.03	354	354	0.03	35.3	35.4	—	1,632	1,632	0.01	0.26	0.09	1,710
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.87	0.74	0.93	11.2	0.00	0.00	1,805	1,805	0.00	180	180	—	1,879	1,879	0.08	0.07	3.15	1,904
Vendor	0.01	0.01	0.22	0.09	< 0.005	< 0.005	42.4	42.4	< 0.005	4.23	4.23	—	180	180	< 0.005	0.02	0.21	187
Hauling	0.04	0.02	1.40	0.33	0.01	0.02	249	249	0.02	24.9	24.9	—	1,165	1,165	0.01	0.19	1.09	1,222
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.16	0.14	0.17	2.05	0.00	0.00	329	329	0.00	32.9	32.9	—	311	311	0.01	0.01	0.52	315
Vendor	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	7.73	7.73	< 0.005	0.77	0.77	—	29.8	29.8	< 0.005	< 0.005	0.04	31.0
Hauling	0.01	< 0.005	0.26	0.06	< 0.005	< 0.005	45.5	45.5	< 0.005	4.54	4.55	—	193	193	< 0.005	0.03	0.18	202

3.3. Linear, Grubbing & Land Clearing (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.21	0.21	3.83	12.3	0.02	0.03	—	0.03	0.03	—	0.03	—	1,755	1,755	0.07	0.01	—	1,761
Dust From Material Movement	—	—	—	—	—	—	0.42	0.42	—	0.05	0.05	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.43	3.43	< 0.005	< 0.005	—	3.45
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.57	0.57	< 0.005	< 0.005	—	0.57

Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.01	0.91	1.23	11.5	0.00	0.00	2,561	2,561	0.00	256	256	—	2,400	2,400	0.12	0.09	0.24	2,431
Vendor	0.01	0.01	0.29	0.12	< 0.005	< 0.005	60.1	60.1	< 0.005	6.00	6.01	—	247	247	< 0.005	0.03	0.02	258
Hauling	0.05	0.03	1.95	0.46	0.01	0.03	354	354	0.03	35.3	35.4	—	1,597	1,597	0.01	0.25	0.09	1,673
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	4.95	4.95	0.00	0.49	0.49	—	5.05	5.05	< 0.005	< 0.005	0.01	5.12
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.12	0.12	< 0.005	0.01	0.01	—	0.48	0.48	< 0.005	< 0.005	< 0.005	0.50
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.68	0.68	< 0.005	0.07	0.07	—	3.12	3.12	< 0.005	< 0.005	< 0.005	3.27
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	0.90	0.90	0.00	0.09	0.09	—	0.84	0.84	< 0.005	< 0.005	< 0.005	0.85
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	—	0.08	0.08	< 0.005	< 0.005	< 0.005	0.08
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.12	0.12	< 0.005	0.01	0.01	—	0.52	0.52	< 0.005	< 0.005	< 0.005	0.54

3.5. Linear, Grading & Excavation (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.75	2.75	23.7	160	0.25	0.52	—	0.52	0.52	—	0.52	—	27,614	27,614	1.12	0.22	—	27,708
Dust From Material Movement	—	—	—	—	—	—	3.45	3.45	—	0.37	0.37	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.75	2.75	23.7	160	0.25	0.52	—	0.52	0.52	—	0.52	—	27,614	27,614	1.12	0.22	—	27,708
Dust From Material Movement	—	—	—	—	—	—	3.45	3.45	—	0.37	0.37	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.96	1.96	16.9	114	0.18	0.37	—	0.37	0.37	—	0.37	—	19,670	19,670	0.80	0.16	—	19,737
Dust From Material Movement	—	—	—	—	—	—	2.46	2.46	—	0.27	0.27	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.36	0.36	3.08	20.7	0.03	0.07	—	0.07	0.07	—	0.07	—	3,257	3,257	0.13	0.03	—	3,268
Dust From Material Movement	—	—	—	—	—	—	0.45	0.45	—	0.05	0.05	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.92	1.77	1.64	31.1	0.00	0.00	3,923	3,923	0.00	392	392	—	4,351	4,351	0.17	0.14	14.3	4,412
Vendor	0.02	0.02	0.40	0.18	< 0.005	0.01	90.1	90.1	0.01	9.01	9.01	—	371	371	< 0.005	0.05	0.93	387
Hauling	0.01	0.01	0.44	0.11	< 0.005	0.01	88.4	88.4	0.01	8.83	8.84	—	399	399	< 0.005	0.06	0.84	419
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.55	1.40	1.88	17.5	0.00	0.00	3,923	3,923	0.00	392	392	—	3,677	3,677	0.18	0.14	0.37	3,725
Vendor	0.02	0.01	0.44	0.18	< 0.005	0.01	90.1	90.1	0.01	9.01	9.01	—	371	371	< 0.005	0.05	0.02	386
Hauling	0.01	0.01	0.49	0.11	< 0.005	0.01	88.4	88.4	0.01	8.83	8.84	—	399	399	< 0.005	0.06	0.02	418
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.18	1.07	1.33	15.8	0.00	0.00	2,758	2,758	0.00	275	275	—	2,816	2,816	0.12	0.10	4.39	2,854
Vendor	0.01	0.01	0.31	0.13	< 0.005	< 0.005	63.4	63.4	< 0.005	6.33	6.34	—	264	264	< 0.005	0.04	0.29	275
Hauling	0.01	0.01	0.34	0.08	< 0.005	0.01	62.1	62.1	0.01	6.21	6.21	—	284	284	< 0.005	0.04	0.26	298
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.21	0.20	0.24	2.89	0.00	0.00	503	503	0.00	50.3	50.3	—	466	466	0.02	0.02	0.73	472
Vendor	< 0.005	< 0.005	0.06	0.02	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	43.7	43.7	< 0.005	0.01	0.05	45.6
Hauling	< 0.005	< 0.005	0.06	0.01	< 0.005	< 0.005	11.3	11.3	< 0.005	1.13	1.13	—	47.1	47.1	< 0.005	0.01	0.04	49.3

3.7. Linear, Grading & Excavation (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.75	2.75	23.7	160	0.26	0.52	—	0.52	0.52	—	0.52	—	27,614	27,614	1.12	0.22	—	27,709
Dust From Material Movement	—	—	—	—	—	—	3.45	3.45	—	0.37	0.37	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.75	2.75	23.7	160	0.26	0.52	—	0.52	0.52	—	0.52	—	27,614	27,614	1.12	0.22	—	27,709
Dust From Material Movement	—	—	—	—	—	—	3.45	3.45	—	0.37	0.37	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.97	1.97	16.9	114	0.18	0.37	—	0.37	0.37	—	0.37	—	19,725	19,725	0.80	0.16	—	19,792

Dust From Material Movement	—	—	—	—	—	—	2.46	2.46	—	0.27	0.27	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.36	0.36	3.09	20.8	0.03	0.07	—	0.07	0.07	—	0.07	—	3,266	3,266	0.13	0.03	—	3,277
Dust From Material Movement	—	—	—	—	—	—	0.45	0.45	—	0.05	0.05	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.82	1.68	1.51	28.2	0.00	0.00	3,923	3,923	0.00	392	392	—	4,275	4,275	0.17	0.14	13.0	4,335
Vendor	0.02	0.02	0.38	0.17	< 0.005	0.01	90.1	90.1	0.01	9.01	9.01	—	363	363	< 0.005	0.05	0.81	379
Hauling	0.01	0.01	0.43	0.11	< 0.005	0.01	88.4	88.4	0.01	8.83	8.84	—	390	390	< 0.005	0.06	0.78	409
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.37	1.23	1.75	15.8	0.00	0.00	3,923	3,923	0.00	392	392	—	3,615	3,615	0.18	0.14	0.34	3,662
Vendor	0.02	0.01	0.42	0.17	< 0.005	0.01	90.1	90.1	0.01	9.01	9.01	—	363	363	< 0.005	0.05	0.02	379
Hauling	0.01	0.01	0.48	0.11	< 0.005	0.01	88.4	88.4	0.01	8.83	8.84	—	390	390	< 0.005	0.06	0.02	409
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.13	1.03	1.16	14.3	0.00	0.00	2,765	2,765	0.00	276	276	—	2,775	2,775	0.12	0.10	4.01	2,811
Vendor	0.01	0.01	0.30	0.12	< 0.005	< 0.005	63.5	63.5	< 0.005	6.35	6.35	—	259	259	< 0.005	0.04	0.25	271

Hauling	0.01	0.01	0.33	0.08	< 0.005	0.01	62.3	62.3	0.01	6.23	6.23	—	279	279	< 0.005	0.04	0.24	292
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.21	0.19	0.21	2.61	0.00	0.00	505	505	0.00	50.4	50.4	—	459	459	0.02	0.02	0.66	465
Vendor	< 0.005	< 0.005	0.05	0.02	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	42.9	42.9	< 0.005	0.01	0.04	44.8
Hauling	< 0.005	< 0.005	0.06	0.01	< 0.005	< 0.005	11.4	11.4	< 0.005	1.14	1.14	—	46.1	46.1	< 0.005	0.01	0.04	48.4

3.9. Linear, Grading & Excavation (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.75	2.75	23.7	160	0.26	0.52	—	0.52	0.52	—	0.52	—	27,614	27,614	1.12	0.22	—	27,709
Dust From Material Movement	—	—	—	—	—	—	3.45	3.45	—	0.37	0.37	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.75	2.75	23.7	160	0.26	0.52	—	0.52	0.52	—	0.52	—	27,614	27,614	1.12	0.22	—	27,709
Dust From Material Movement	—	—	—	—	—	—	3.45	3.45	—	0.37	0.37	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.97	1.97	17.0	114	0.18	0.37	—	0.37	0.37	—	0.37	—	19,778	19,778	0.80	0.16	—	19,846
Dust From Material Movement	—	—	—	—	—	—	2.47	2.47	—	0.27	0.27	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.36	0.36	3.09	20.9	0.03	0.07	—	0.07	0.07	—	0.07	—	3,275	3,275	0.13	0.03	—	3,286
Dust From Material Movement	—	—	—	—	—	—	0.45	0.45	—	0.05	0.05	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.73	1.48	1.38	26.2	0.00	0.00	3,923	3,923	0.00	392	392	—	4,195	4,195	0.16	0.14	11.8	4,253
Vendor	0.02	0.01	0.37	0.16	< 0.005	0.01	90.1	90.1	0.01	9.01	9.01	—	354	354	< 0.005	0.05	0.69	369
Hauling	0.01	0.01	0.42	0.11	< 0.005	0.01	88.4	88.4	0.01	8.83	8.84	—	380	380	< 0.005	0.06	0.72	398
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.31	1.17	1.62	14.7	0.00	0.00	3,923	3,923	0.00	392	392	—	3,547	3,547	0.06	0.14	0.31	3,592

Vendor	0.01	0.01	0.40	0.16	< 0.005	0.01	90.1	90.1	0.01	9.01	9.01	—	354	354	< 0.005	0.05	0.02	369
Hauling	0.01	0.01	0.46	0.11	< 0.005	0.01	88.4	88.4	0.01	8.83	8.84	—	380	380	< 0.005	0.06	0.02	398
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.00	0.90	1.07	13.3	0.00	0.00	2,773	2,773	0.00	277	277	—	2,731	2,731	0.12	0.10	3.65	2,767
Vendor	0.01	0.01	0.28	0.11	< 0.005	< 0.005	63.7	63.7	< 0.005	6.37	6.37	—	254	254	< 0.005	0.03	0.22	264
Hauling	0.01	0.01	0.33	0.08	< 0.005	0.01	62.5	62.5	0.01	6.24	6.25	—	272	272	< 0.005	0.04	0.22	285
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.18	0.17	0.19	2.43	0.00	0.00	506	506	0.00	50.5	50.5	—	452	452	0.02	0.02	0.60	458
Vendor	< 0.005	< 0.005	0.05	0.02	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	42.0	42.0	< 0.005	0.01	0.04	43.7
Hauling	< 0.005	< 0.005	0.06	0.01	< 0.005	< 0.005	11.4	11.4	< 0.005	1.14	1.14	—	45.0	45.0	< 0.005	0.01	0.04	47.2

3.11. Linear, Grading & Excavation (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.75	2.75	23.7	160	0.26	0.52	—	0.52	0.52	—	0.52	—	27,611	27,611	1.12	0.22	—	27,706
Dust From Material Movement	—	—	—	—	—	—	3.45	3.45	—	0.37	0.37	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	2.75	2.75	23.7	160	0.26	0.52	—	0.52	0.52	—	0.52	—	27,611	27,611	1.12	0.22	—	27,706
Dust From Material Movement	—	—	—	—	—	—	3.45	3.45	—	0.37	0.37	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	1.97	1.97	16.9	114	0.18	0.37	—	0.37	0.37	—	0.37	—	19,722	19,722	0.80	0.16	—	19,790
Dust From Material Movement	—	—	—	—	—	—	2.46	2.46	—	0.27	0.27	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.36	0.36	3.09	20.8	0.03	0.07	—	0.07	0.07	—	0.07	—	3,265	3,265	0.13	0.03	—	3,276
Dust From Material Movement	—	—	—	—	—	—	0.45	0.45	—	0.05	0.05	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.53	1.39	1.25	24.1	0.00	0.00	3,923	3,923	0.00	392	392	—	4,117	4,117	0.16	0.14	10.6	4,174
Vendor	0.02	0.01	0.35	0.15	< 0.005	0.01	90.1	90.1	0.01	9.01	9.01	—	344	344	< 0.005	0.05	0.59	359

Hauling	0.01	0.01	0.41	0.11	< 0.005	0.01	88.4	88.4	0.01	8.83	8.84	—	370	370	< 0.005	0.06	0.67	388
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.26	1.12	1.37	13.5	0.00	0.00	3,923	3,923	0.00	392	392	—	3,484	3,484	0.05	0.14	0.28	3,526
Vendor	0.01	0.01	0.38	0.15	< 0.005	0.01	90.1	90.1	0.01	9.01	9.01	—	345	345	< 0.005	0.05	0.02	359
Hauling	0.01	0.01	0.45	0.11	< 0.005	0.01	88.4	88.4	0.01	8.83	8.84	—	370	370	< 0.005	0.06	0.02	387
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.95	0.85	0.97	12.3	0.00	0.00	2,765	2,765	0.00	276	276	—	2,674	2,674	0.03	0.10	3.28	2,707
Vendor	0.01	0.01	0.27	0.11	< 0.005	< 0.005	63.5	63.5	< 0.005	6.35	6.35	—	246	246	< 0.005	0.03	0.18	256
Hauling	0.01	0.01	0.32	0.08	< 0.005	0.01	62.3	62.3	0.01	6.23	6.23	—	264	264	< 0.005	0.04	0.21	277
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.17	0.16	0.18	2.25	0.00	0.00	505	505	0.00	50.4	50.4	—	443	443	0.01	0.02	0.54	448
Vendor	< 0.005	< 0.005	0.05	0.02	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	40.7	40.7	< 0.005	0.01	0.03	42.5
Hauling	< 0.005	< 0.005	0.06	0.01	< 0.005	< 0.005	11.4	11.4	< 0.005	1.14	1.14	—	43.8	43.8	< 0.005	0.01	0.03	45.8

3.13. Linear, Grading & Excavation (2030) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.75	2.75	23.7	160	0.26	0.52	—	0.52	0.52	—	0.52	—	27,611	27,611	1.12	0.22	—	27,706
Dust From Material Movement	—	—	—	—	—	—	3.45	3.45	—	0.37	0.37	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.75	2.75	23.7	160	0.26	0.52	—	0.52	0.52	—	0.52	—	27,611	27,611	1.12	0.22	—	27,706
Dust From Material Movement	—	—	—	—	—	—	3.45	3.45	—	0.37	0.37	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.99	0.99	8.48	57.2	0.09	0.19	—	0.19	0.19	—	0.19	—	9,888	9,888	0.40	0.08	—	9,922
Dust From Material Movement	—	—	—	—	—	—	1.23	1.23	—	0.13	0.13	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.18	0.18	1.55	10.4	0.02	0.03	—	0.03	0.03	—	0.03	—	1,637	1,637	0.07	0.01	—	1,643
Dust From Material Movement	—	—	—	—	—	—	0.23	0.23	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.46	1.32	1.12	22.3	0.00	0.00	3,923	3,923	0.00	392	392	—	4,045	4,045	0.04	0.14	9.54	4,096
Vendor	0.02	0.01	0.34	0.14	< 0.005	0.01	90.1	90.1	0.01	9.01	9.01	—	334	334	< 0.005	0.05	0.49	348
Hauling	0.01	0.01	0.40	0.10	< 0.005	0.01	88.4	88.4	0.01	8.83	8.84	—	360	360	< 0.005	0.06	0.61	378
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.09	1.07	1.24	12.5	0.00	0.00	3,923	3,923	0.00	392	392	—	3,424	3,424	0.05	0.14	0.25	3,466
Vendor	0.01	0.01	0.37	0.15	< 0.005	0.01	90.1	90.1	0.01	9.01	9.01	—	334	334	< 0.005	0.05	0.01	348
Hauling	0.01	0.01	0.44	0.11	< 0.005	0.01	88.4	88.4	0.01	8.83	8.84	—	361	361	< 0.005	0.06	0.02	378
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.45	0.40	0.44	5.70	0.00	0.00	1,386	1,386	0.00	138	138	—	1,317	1,317	0.02	0.05	1.47	1,334
Vendor	0.01	< 0.005	0.13	0.05	< 0.005	< 0.005	31.9	31.9	< 0.005	3.18	3.18	—	120	120	< 0.005	0.02	0.08	125
Hauling	< 0.005	< 0.005	0.15	0.04	< 0.005	< 0.005	31.2	31.2	< 0.005	3.12	3.12	—	129	129	< 0.005	0.02	0.09	135
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.08	1.04	0.00	0.00	253	253	0.00	25.3	25.3	—	218	218	< 0.005	0.01	0.24	221
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	5.81	5.81	< 0.005	0.58	0.58	—	19.8	19.8	< 0.005	< 0.005	0.01	20.6
Hauling	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	5.70	5.70	< 0.005	0.57	0.57	—	21.4	21.4	< 0.005	< 0.005	0.02	22.4

3.15. Linear, Drainage, Utilities, & Sub-Grade (2030) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	2.07	2.07	18.7	117	0.19	0.39	—	0.39	0.39	—	0.39	—	20,274	20,274	0.82	0.16	—	20,343
Dust From Material Movement	—	—	—	—	—	—	2.48	2.48	—	0.27	0.27	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.07	2.07	18.7	117	0.19	0.39	—	0.39	0.39	—	0.39	—	20,274	20,274	0.82	0.16	—	20,343
Dust From Material Movement	—	—	—	—	—	—	2.48	2.48	—	0.27	0.27	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.74	0.74	6.66	41.6	0.07	0.14	—	0.14	0.14	—	0.14	—	7,221	7,221	0.29	0.06	—	7,245
Dust From Material Movement	—	—	—	—	—	—	0.88	0.88	—	0.10	0.10	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.13	1.21	7.60	0.01	0.03	—	0.03	0.03	—	0.03	—	1,195	1,195	0.05	0.01	—	1,200

Dust From Material Movement	—	—	—	—	—	—	0.16	0.16	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.26	1.15	0.98	19.4	0.00	0.00	3,405	3,405	0.00	340	340	—	3,511	3,511	0.03	0.12	8.28	3,555
Vendor	0.01	0.01	0.22	0.09	< 0.005	< 0.005	60.1	60.1	< 0.005	6.00	6.01	—	223	223	< 0.005	0.03	0.33	232
Hauling	0.02	0.01	0.53	0.14	< 0.005	0.01	118	118	0.01	11.8	11.8	—	481	481	< 0.005	0.08	0.81	504
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.94	0.93	1.08	10.9	0.00	0.00	3,405	3,405	0.00	340	340	—	2,972	2,972	0.04	0.12	0.21	3,009
Vendor	0.01	0.01	0.25	0.10	< 0.005	< 0.005	60.1	60.1	< 0.005	6.00	6.01	—	223	223	< 0.005	0.03	0.01	232
Hauling	0.02	0.01	0.59	0.14	< 0.005	0.01	118	118	0.01	11.8	11.8	—	481	481	< 0.005	0.08	0.02	504
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.39	0.35	0.38	4.92	0.00	0.00	1,197	1,197	0.00	120	120	—	1,137	1,137	0.01	0.04	1.27	1,151
Vendor	< 0.005	< 0.005	0.09	0.03	< 0.005	< 0.005	21.1	21.1	< 0.005	2.11	2.11	—	79.4	79.4	< 0.005	0.01	0.05	82.7
Hauling	0.01	< 0.005	0.21	0.05	< 0.005	< 0.005	41.4	41.4	< 0.005	4.14	4.14	—	171	171	< 0.005	0.03	0.13	179
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.07	0.90	0.00	0.00	218	218	0.00	21.8	21.8	—	188	188	< 0.005	0.01	0.21	191
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	3.85	3.85	< 0.005	0.39	0.39	—	13.1	13.1	< 0.005	< 0.005	0.01	13.7
Hauling	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	7.56	7.56	< 0.005	0.76	0.76	—	28.3	28.3	< 0.005	< 0.005	0.02	29.7

3.17. Linear, Drainage, Utilities, & Sub-Grade (2031) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.07	2.07	18.7	117	0.19	0.39	—	0.39	0.39	—	0.39	—	20,274	20,274	0.82	0.16	—	20,343
Dust From Material Movement	—	—	—	—	—	—	2.48	2.48	—	0.27	0.27	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.07	2.07	18.7	117	0.19	0.39	—	0.39	0.39	—	0.39	—	20,274	20,274	0.82	0.16	—	20,343
Dust From Material Movement	—	—	—	—	—	—	2.48	2.48	—	0.27	0.27	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.48	1.48	13.3	83.5	0.14	0.28	—	0.28	0.28	—	0.28	—	14,481	14,481	0.59	0.12	—	14,531
Dust From Material Movement	—	—	—	—	—	—	1.77	1.77	—	0.19	0.19	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.27	0.27	2.44	15.2	0.03	0.05	—	0.05	0.05	—	0.05	—	2,398	2,398	0.10	0.02	—	2,406
Dust From Material Movement	—	—	—	—	—	—	0.32	0.32	—	0.03	0.03	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.19	1.07	0.87	17.9	0.00	0.00	3,405	3,405	0.00	340	340	—	3,453	3,453	0.03	0.12	7.41	3,496
Vendor	0.01	0.01	0.22	0.09	< 0.005	< 0.005	60.1	60.1	< 0.005	6.00	6.01	—	216	216	< 0.005	0.03	0.27	225
Hauling	0.02	0.01	0.52	0.14	< 0.005	0.01	118	118	0.01	11.8	11.8	—	469	469	< 0.005	0.07	0.74	491
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.90	0.88	0.96	10.0	0.00	0.00	3,405	3,405	0.00	340	340	—	2,924	2,924	0.04	0.12	0.19	2,961
Vendor	0.01	0.01	0.24	0.09	< 0.005	< 0.005	60.1	60.1	< 0.005	6.00	6.01	—	216	216	< 0.005	0.03	0.01	225
Hauling	0.02	0.01	0.57	0.14	< 0.005	0.01	118	118	0.01	11.8	11.8	—	469	469	< 0.005	0.07	0.02	491
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.68	0.67	0.69	9.12	0.00	0.00	2,400	2,400	0.00	240	240	—	2,243	2,243	0.02	0.08	2.28	2,272
Vendor	0.01	< 0.005	0.17	0.06	< 0.005	< 0.005	42.4	42.4	< 0.005	4.23	4.23	—	154	154	< 0.005	0.02	0.08	161
Hauling	0.01	0.01	0.40	0.10	< 0.005	0.01	83.1	83.1	0.01	8.30	8.31	—	335	335	< 0.005	0.05	0.23	351
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.12	0.13	1.66	0.00	0.00	438	438	0.00	43.7	43.7	—	371	371	< 0.005	0.01	0.38	376

Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	7.73	7.73	< 0.005	0.77	0.77	—	25.6	25.6	< 0.005	< 0.005	0.01	26.6
Hauling	< 0.005	< 0.005	0.07	0.02	< 0.005	< 0.005	15.2	15.2	< 0.005	1.52	1.52	—	55.4	55.4	< 0.005	0.01	0.04	58.1

3.19. Linear, Drainage, Utilities, & Sub-Grade (2032) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.07	2.07	18.7	117	0.19	0.39	—	0.39	0.39	—	0.39	—	20,274	20,274	0.82	0.16	—	20,343
Dust From Material Movement	—	—	—	—	—	—	2.48	2.48	—	0.27	0.27	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.07	2.07	18.7	117	0.19	0.39	—	0.39	0.39	—	0.39	—	20,274	20,274	0.82	0.16	—	20,343
Dust From Material Movement	—	—	—	—	—	—	2.48	2.48	—	0.27	0.27	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	1.48	1.48	13.4	83.8	0.14	0.28	—	0.28	0.28	—	0.28	—	14,521	14,521	0.59	0.12	—	14,571
Dust From Material Movement	—	—	—	—	—	—	1.78	1.78	—	0.19	0.19	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.27	0.27	2.44	15.3	0.03	0.05	—	0.05	0.05	—	0.05	—	2,404	2,404	0.10	0.02	—	2,412
Dust From Material Movement	—	—	—	—	—	—	0.32	0.32	—	0.04	0.04	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.03	1.01	0.76	16.7	0.00	0.00	3,405	3,405	0.00	340	340	—	3,400	3,400	0.03	0.12	6.59	3,443
Vendor	0.01	0.01	0.21	0.09	< 0.005	< 0.005	60.1	60.1	< 0.005	6.00	6.01	—	210	210	< 0.005	0.03	0.22	218
Hauling	0.02	0.01	0.51	0.14	< 0.005	0.01	118	118	0.01	11.8	11.8	—	458	458	< 0.005	0.07	0.67	480
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.85	0.73	0.86	9.35	0.00	0.00	3,405	3,405	0.00	340	340	—	2,881	2,881	0.04	0.12	0.17	2,917
Vendor	0.01	0.01	0.23	0.09	< 0.005	< 0.005	60.1	60.1	< 0.005	6.00	6.01	—	210	210	< 0.005	0.03	0.01	218
Hauling	0.02	0.01	0.57	0.14	< 0.005	0.01	118	118	0.01	11.8	11.8	—	458	458	< 0.005	0.07	0.02	480
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.64	0.55	0.61	8.48	0.00	0.00	2,407	2,407	0.00	240	240	—	2,216	2,216	0.02	0.08	2.04	2,244

Vendor	0.01	< 0.005	0.16	0.06	< 0.005	< 0.005	42.5	42.5	< 0.005	4.24	4.25	—	150	150	< 0.005	0.02	0.07	156
Hauling	0.01	0.01	0.40	0.10	< 0.005	0.01	83.3	83.3	0.01	8.32	8.33	—	328	328	< 0.005	0.05	0.21	344
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.10	0.11	1.55	0.00	0.00	439	439	0.00	43.9	43.9	—	367	367	< 0.005	0.01	0.34	372
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	7.75	7.75	< 0.005	0.77	0.78	—	24.9	24.9	< 0.005	< 0.005	0.01	25.9
Hauling	< 0.005	< 0.005	0.07	0.02	< 0.005	< 0.005	15.2	15.2	< 0.005	1.52	1.52	—	54.3	54.3	< 0.005	0.01	0.03	56.9

3.21. Linear, Drainage, Utilities, & Sub-Grade (2033) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.07	2.07	18.7	117	0.19	0.39	—	0.39	0.39	—	0.39	—	20,274	20,274	0.82	0.16	—	20,343
Dust From Material Movement	—	—	—	—	—	—	2.48	2.48	—	0.27	0.27	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.07	2.07	18.7	117	0.19	0.39	—	0.39	0.39	—	0.39	—	20,274	20,274	0.82	0.16	—	20,343

Dust From Material Movement	—	—	—	—	—	—	2.48	2.48	—	0.27	0.27	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.74	0.74	6.66	41.6	0.07	0.14	—	0.14	0.14	—	0.14	—	7,221	7,221	0.29	0.06	—	7,246
Dust From Material Movement	—	—	—	—	—	—	0.88	0.88	—	0.10	0.10	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.13	1.21	7.60	0.01	0.03	—	0.03	0.03	—	0.03	—	1,195	1,195	0.05	0.01	—	1,200
Dust From Material Movement	—	—	—	—	—	—	0.16	0.16	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.98	0.86	0.65	15.6	0.00	0.00	3,405	3,405	0.00	340	340	—	3,353	3,353	0.03	0.02	5.83	3,365
Vendor	0.01	0.01	0.20	0.08	< 0.005	< 0.005	60.1	60.1	< 0.005	6.00	6.01	—	204	204	< 0.005	0.03	0.18	212
Hauling	0.02	0.01	0.51	0.13	< 0.005	0.01	118	118	0.01	11.8	11.8	—	449	449	< 0.005	0.07	0.61	470

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.82	0.70	0.75	8.73	0.00	0.00	3,405	3,405	0.00	340	340	—	2,842	2,842	0.03	0.12	0.15	2,878
Vendor	0.01	0.01	0.22	0.09	< 0.005	< 0.005	60.1	60.1	< 0.005	6.00	6.01	—	204	204	< 0.005	0.03	< 0.005	212
Hauling	0.02	0.01	0.56	0.14	< 0.005	0.01	118	118	0.01	11.8	11.8	—	449	449	< 0.005	0.07	0.02	470
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.31	0.27	0.27	3.96	0.00	0.00	1,197	1,197	0.00	120	120	—	1,087	1,087	0.01	0.04	0.90	1,101
Vendor	< 0.005	< 0.005	0.08	0.03	< 0.005	< 0.005	21.1	21.1	< 0.005	2.11	2.11	—	72.5	72.5	< 0.005	0.01	0.03	75.6
Hauling	0.01	< 0.005	0.19	0.05	< 0.005	< 0.005	41.4	41.4	< 0.005	4.14	4.14	—	160	160	< 0.005	0.02	0.09	167
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.05	0.72	0.00	0.00	218	218	0.00	21.8	21.8	—	180	180	< 0.005	0.01	0.15	182
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	3.85	3.85	< 0.005	0.39	0.39	—	12.0	12.0	< 0.005	< 0.005	< 0.005	12.5
Hauling	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	7.56	7.56	< 0.005	0.76	0.76	—	26.5	26.5	< 0.005	< 0.005	0.02	27.7

3.23. Linear, Paving (2033) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	0.50	5.89	33.1	0.04	0.09	—	0.09	0.09	—	0.09	—	4,722	4,722	0.19	0.04	—	4,738
Architectural Coatings	16.3	16.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	0.50	5.89	33.1	0.04	0.09	—	0.09	0.09	—	0.09	—	4,722	4,722	0.19	0.04	—	4,738
Architectural Coatings	16.3	16.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.18	0.18	2.11	11.8	0.02	0.03	—	0.03	0.03	—	0.03	—	1,691	1,691	0.07	0.01	—	1,697
Architectural Coatings	5.85	5.85	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.38	2.16	< 0.005	0.01	—	0.01	0.01	—	0.01	—	280	280	0.01	< 0.005	—	281
Architectural Coatings	1.07	1.07	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.84	0.75	0.56	13.5	0.00	0.00	2,942	2,942	0.00	294	294	—	2,897	2,897	0.02	0.01	5.04	2,907
Vendor	0.01	0.01	0.20	0.08	< 0.005	< 0.005	60.1	60.1	< 0.005	6.00	6.01	—	204	204	< 0.005	0.03	0.18	212
Hauling	0.19	0.13	5.83	1.54	0.04	0.12	1,355	1,355	0.12	135	136	—	5,158	5,158	0.05	0.80	6.96	5,404
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.70	0.60	0.65	7.54	0.00	0.00	2,942	2,942	0.00	294	294	—	2,455	2,455	0.03	0.10	0.13	2,487
Vendor	0.01	0.01	0.22	0.09	< 0.005	< 0.005	60.1	60.1	< 0.005	6.00	6.01	—	204	204	< 0.005	0.03	< 0.005	212
Hauling	0.18	0.12	6.39	1.58	0.04	0.12	1,355	1,355	0.12	135	136	—	5,163	5,163	0.05	0.80	0.18	5,402
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.27	0.23	0.23	3.44	0.00	0.00	1,040	1,040	0.00	104	104	—	944	944	0.01	0.04	0.78	956
Vendor	< 0.005	< 0.005	0.08	0.03	< 0.005	< 0.005	21.2	21.2	< 0.005	2.12	2.12	—	72.9	72.9	< 0.005	0.01	0.03	76.0
Hauling	0.07	0.04	2.25	0.56	0.02	0.04	479	479	0.04	47.9	47.9	—	1,848	1,848	0.02	0.29	1.07	1,935
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.04	0.63	0.00	0.00	190	190	0.00	18.9	18.9	—	156	156	< 0.005	0.01	0.13	158
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	3.88	3.88	< 0.005	0.39	0.39	—	12.1	12.1	< 0.005	< 0.005	< 0.005	12.6
Hauling	0.01	0.01	0.41	0.10	< 0.005	0.01	87.4	87.4	0.01	8.74	8.74	—	306	306	< 0.005	0.05	0.18	320

3.25. Linear, Paving (2034) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.50	0.50	5.89	33.1	0.04	0.09	—	0.09	0.09	—	0.09	—	4,722	4,722	0.19	0.04	—	4,738
Architectural Coatings	16.3	16.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	0.50	5.89	33.1	0.04	0.09	—	0.09	0.09	—	0.09	—	4,722	4,722	0.19	0.04	—	4,738
Architectural Coatings	16.3	16.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.35	0.35	4.21	23.6	0.03	0.06	—	0.06	0.06	—	0.06	—	3,373	3,373	0.14	0.03	—	3,384
Architectural Coatings	11.7	11.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	0.77	4.31	0.01	0.01	—	0.01	0.01	—	0.01	—	558	558	0.02	< 0.005	—	560

Architect Coatings	2.13	2.13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.79	0.69	0.55	12.5	0.00	0.00	2,942	2,942	0.00	294	294	—	2,858	2,858	0.02	0.01	4.43	2,867
Vendor	0.01	0.01	0.20	0.08	< 0.005	< 0.005	60.1	60.1	< 0.005	6.00	6.01	—	198	198	< 0.005	0.03	0.14	206
Hauling	0.19	0.13	5.75	1.51	0.04	0.12	1,355	1,355	0.12	135	136	—	5,066	5,066	0.05	0.80	6.21	5,311
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.67	0.57	0.55	7.00	0.00	0.00	2,942	2,942	0.00	294	294	—	2,423	2,423	0.03	0.10	0.11	2,454
Vendor	0.01	0.01	0.22	0.09	< 0.005	< 0.005	60.1	60.1	< 0.005	6.00	6.01	—	198	198	< 0.005	0.03	< 0.005	207
Hauling	0.18	0.12	6.31	1.55	0.04	0.12	1,355	1,355	0.12	135	136	—	5,071	5,071	0.05	0.80	0.16	5,310
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.50	0.43	0.39	6.37	0.00	0.00	2,074	2,074	0.00	207	207	—	1,858	1,858	0.02	0.07	1.37	1,882
Vendor	0.01	< 0.005	0.15	0.06	< 0.005	< 0.005	42.4	42.4	< 0.005	4.23	4.23	—	141	141	< 0.005	0.02	0.04	147
Hauling	0.13	0.09	4.43	1.09	0.03	0.09	955	955	0.09	95.5	95.6	—	3,620	3,620	0.04	0.57	1.91	3,793
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.07	1.16	0.00	0.00	378	378	0.00	37.8	37.8	—	308	308	< 0.005	0.01	0.23	312
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	7.73	7.73	< 0.005	0.77	0.77	—	23.4	23.4	< 0.005	< 0.005	0.01	24.4
Hauling	0.02	0.02	0.81	0.20	0.01	0.02	174	174	0.02	17.4	17.4	—	599	599	0.01	0.09	0.32	628

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Remove	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Linear, Grubbing & Land Clearing	Linear, Grubbing & Land Clearing	1/1/2025	1/1/2026	5.00	261	—
Linear, Grading & Excavation	Linear, Grading & Excavation	1/2/2026	7/2/2030	5.00	1,173	—
Linear, Drainage, Utilities, & Sub-Grade	Linear, Drainage, Utilities, & Sub-Grade	7/3/2030	7/1/2033	5.00	782	—
Linear, Paving	Linear, Paving	7/2/2033	12/31/2034	5.00	391	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Linear, Grubbing & Land Clearing	Crawler Tractors	Diesel	Tier 4 Final	3.00	8.00	87.0	0.43
Linear, Grubbing & Land Clearing	Excavators	Diesel	Tier 4 Final	5.00	8.00	36.0	0.38
Linear, Grubbing & Land Clearing	Signal Boards	Electric	Average	67.0	8.00	6.00	0.82
Linear, Grading & Excavation	Crawler Tractors	Diesel	Tier 4 Final	4.00	8.00	87.0	0.43
Linear, Grading & Excavation	Excavators	Diesel	Tier 4 Final	10.0	8.00	36.0	0.38

Linear, Grading & Excavation	Graders	Diesel	Tier 4 Final	5.00	8.00	148	0.41
Linear, Grading & Excavation	Rollers	Diesel	Tier 4 Final	7.00	8.00	36.0	0.38
Linear, Grading & Excavation	Rubber Tired Loaders	Diesel	Tier 4 Final	5.00	8.00	150	0.36
Linear, Grading & Excavation	Scrapers	Diesel	Tier 4 Final	8.00	8.00	423	0.48
Linear, Grading & Excavation	Signal Boards	Electric	Average	67.0	8.00	6.00	0.82
Linear, Grading & Excavation	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	8.00	8.00	84.0	0.37
Linear, Grading & Excavation	Cranes	Diesel	Tier 4 Final	1.00	8.00	367	0.29
Linear, Drainage, Utilities, & Sub-Grade	Air Compressors	Diesel	Tier 4 Final	3.00	8.00	37.0	0.48
Linear, Drainage, Utilities, & Sub-Grade	Generator Sets	Diesel	Tier 4 Final	3.00	8.00	25.0	0.74
Linear, Drainage, Utilities, & Sub-Grade	Graders	Diesel	Tier 4 Final	4.00	8.00	148	0.41
Linear, Drainage, Utilities, & Sub-Grade	Plate Compactors	Diesel	Tier 4 Final	3.00	8.00	25.0	0.43
Linear, Drainage, Utilities, & Sub-Grade	Pumps	Diesel	Tier 4 Final	3.00	8.00	25.0	0.74
Linear, Drainage, Utilities, & Sub-Grade	Rough Terrain Forklifts	Diesel	Tier 4 Final	3.00	8.00	96.0	0.40
Linear, Drainage, Utilities, & Sub-Grade	Scrapers	Diesel	Tier 4 Final	7.00	8.00	423	0.48
Linear, Drainage, Utilities, & Sub-Grade	Signal Boards	Electric	Average	67.0	8.00	6.00	0.82
Linear, Drainage, Utilities, & Sub-Grade	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	7.00	8.00	84.0	0.37
Linear, Paving	Pavers	Diesel	Tier 4 Final	3.00	8.00	81.0	0.42
Linear, Paving	Paving Equipment	Diesel	Tier 4 Final	3.00	8.00	89.0	0.36

Linear, Paving	Rollers	Diesel	Tier 4 Final	6.00	8.00	36.0	0.38
Linear, Paving	Signal Boards	Electric	Average	67.0	8.00	6.00	0.82
Linear, Paving	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	7.00	8.00	84.0	0.37

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Linear, Grubbing & Land Clearing	—	—	—	—
Linear, Grubbing & Land Clearing	Worker	188	18.5	LDA,LDT1,LDT2
Linear, Grubbing & Land Clearing	Vendor	8.00	10.2	HHDT,MHDT
Linear, Grubbing & Land Clearing	Hauling	24.0	20.0	HHDT
Linear, Grubbing & Land Clearing	Onsite truck	—	—	HHDT
Linear, Grading & Excavation	—	—	—	—
Linear, Grading & Excavation	Worker	288	18.5	LDA,LDT1,LDT2
Linear, Grading & Excavation	Vendor	12.0	10.2	HHDT,MHDT
Linear, Grading & Excavation	Hauling	6.00	20.0	HHDT
Linear, Grading & Excavation	Onsite truck	—	—	HHDT
Linear, Drainage, Utilities, & Sub-Grade	—	—	—	—
Linear, Drainage, Utilities, & Sub-Grade	Worker	250	18.5	LDA,LDT1,LDT2
Linear, Drainage, Utilities, & Sub-Grade	Vendor	8.00	10.2	HHDT,MHDT
Linear, Drainage, Utilities, & Sub-Grade	Hauling	8.00	20.0	HHDT
Linear, Drainage, Utilities, & Sub-Grade	Onsite truck	—	—	HHDT
Linear, Paving	—	—	—	—

Linear, Paving	Worker	216	18.5	LDA,LDT1,LDT2
Linear, Paving	Vendor	8.00	10.2	HHDT,MHDT
Linear, Paving	Hauling	92.0	20.0	HHDT
Linear, Paving	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Control Strategies Applied	PM10 Reduction	PM2.5 Reduction
Water unpaved roads twice daily	74%	74%
Limit vehicle speeds on unpaved roads to 25 mph	44%	44%
Sweep paved roads once per month	9%	9%

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Linear, Paving	0.00	0.00	0.00	0.00	918,316

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Linear, Grubbing & Land Clearing	—	50,000	381	0.00	—
Linear, Grading & Excavation	—	50,000	381	0.00	—
Linear, Drainage, Utilities, & Sub-Grade	—	50,000	381	0.00	—

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	3	74%	74%
Water Demolished Area	2	36%	36%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Road Construction	174	100%
Road Widening	176	100%
Bridge/Overpass Construction	1.26	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2025	1,967	457	0.03	< 0.005
2026	3,933	457	0.03	< 0.005
2027	1,967	457	0.03	< 0.005
2028	1,967	457	0.03	< 0.005
2029	1,967	457	0.03	< 0.005
2030	3,933	457	0.03	< 0.005
2031	1,967	457	0.03	< 0.005
2032	1,967	457	0.03	< 0.005
2033	3,933	457	0.03	< 0.005
2034	1,967	457	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	32.8	annual days of extreme heat
Extreme Precipitation	0.00	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.19	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A

Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	11.6
AQ-PM	19.1
AQ-DPM	9.09
Drinking Water	30.6
Lead Risk Housing	50.8
Pesticides	90.5
Toxic Releases	7.58
Traffic	3.06
Effect Indicators	—
CleanUp Sites	74.2
Groundwater	77.9
Haz Waste Facilities/Generators	93.2
Impaired Water Bodies	100.0
Solid Waste	86.5

Sensitive Population	—
Asthma	87.6
Cardio-vascular	83.2
Low Birth Weights	26.9
Socioeconomic Factor Indicators	—
Education	82.7
Housing	51.4
Linguistic	88.8
Poverty	94.9
Unemployment	99.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	16.66880534
Employed	7.173104068
Median HI	5.299627871
Education	—
Bachelor's or higher	5.017323239
High school enrollment	16.8741178
Preschool enrollment	68.89516233
Transportation	—
Auto Access	18.40112922
Active commuting	51.10997049
Social	—
2-parent households	13.28114975
Voting	16.79712563

Neighborhood	—
Alcohol availability	70.25535737
Park access	33.85089183
Retail density	4.311561658
Supermarket access	49.58295907
Tree canopy	0.782753753
Housing	—
Homeownership	38.3036058
Housing habitability	30.96368536
Low-inc homeowner severe housing cost burden	26.76761196
Low-inc renter severe housing cost burden	52.89362248
Uncrowded housing	38.58591043
Health Outcomes	—
Insured adults	21.00603105
Arthritis	0.0
Asthma ER Admissions	30.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	41.7
Cognitively Disabled	50.3
Physically Disabled	19.5
Heart Attack ER Admissions	46.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0

Obesity	0.0
Pedestrian Injuries	54.3
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	14.1
Elderly	42.0
English Speaking	18.7
Foreign-born	65.3
Outdoor Workers	5.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	85.8
Traffic Density	4.9
Traffic Access	23.0
Other Indices	—
Hardship	92.9
Other Decision Support	—
2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	82.0

Healthy Places Index Score for Project Location (b)	11.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Construction: Construction Phases	Land use data are based applicant-provided buildout assumptions. Phase 1 (2025-2029) represents 50% of 10-year buildout.
Construction: Off-Road Equipment	Tier 4 Final construction equipment assumed as part of the Lithium Valley Specific Plan.
Construction: Trips and VMT	Rounded up trips. Assumed haul trips based on paved area.
Construction: On-Road Fugitive Dust	85% paved roads assumed, according to ICAPCD guidance. PM reductions altered based on dust control plan implementation strategies (watering unpaved roads three times per day).
Construction: Paving	Paved area acreages calculated based on buildout estimates. Conservatively assumed 100% asphalt.
Construction: Architectural Coatings	6% of total area for striping.
Construction: Dust From Material Movement	Estimated material movement for roadways and infrastructure construction.

Lithium Valley SP Construction - Roadways + Infrastructure - Phase 2 (2035-2044) Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Lithium Valley SP Construction - Roadways + Infrastructure - Phase 2 (2035-2044)
Construction Start Date	1/1/2035
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	4.80
Location	33.18829759139308, -115.6026869228474
County	Imperial
City	Unincorporated
Air District	Imperial County APCD
Air Basin	Salton Sea
TAZ	5600
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Road Construction	7.56	Mile	95.3	0.00	0.00	—	—	—
Road Widening	11.1	Mile	96.3	0.00	0.00	—	—	—

Bridge/Overpass Construction	0.05	Mile	0.69	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	9.85	9.75	24.7	171	0.26	0.53	3,067	3,068	0.53	306	307	—	30,879	30,879	1.14	0.50	3.69	31,005
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	9.81	9.71	24.7	166	0.26	0.53	3,067	3,068	0.53	306	307	—	30,460	30,460	1.15	0.50	0.10	30,582
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	7.01	6.94	17.6	120	0.19	0.38	2,166	2,166	0.38	216	217	—	21,887	21,887	0.82	0.36	1.14	21,976
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.28	1.27	3.22	21.8	0.03	0.07	395	395	0.07	39.5	39.5	—	3,624	3,624	0.14	0.06	0.19	3,638

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2035	0.64	0.58	4.88	18.7	0.02	0.05	1,761	1,761	0.05	176	176	—	3,983	3,983	0.09	0.14	2.76	4,029
2036	3.41	3.39	24.7	171	0.26	0.53	3,067	3,068	0.53	306	307	—	30,879	30,879	1.14	0.31	3.69	31,005
2037	3.37	3.37	24.6	170	0.26	0.53	3,067	3,068	0.53	306	307	—	30,841	30,841	1.14	0.31	3.19	30,966
2038	3.35	3.33	24.5	170	0.26	0.53	3,067	3,068	0.53	306	307	—	30,819	30,819	1.14	0.31	2.76	30,942
2039	3.31	3.29	24.5	169	0.26	0.53	3,067	3,068	0.53	306	307	—	30,791	30,791	1.14	0.31	2.36	30,914
2040	3.28	3.27	24.5	169	0.26	0.53	3,067	3,068	0.53	306	307	—	30,768	30,768	1.14	0.31	2.02	30,890
2041	2.49	2.48	19.3	124	0.20	0.40	2,519	2,519	0.40	252	252	—	22,847	22,847	0.84	0.23	1.44	22,939
2042	2.47	2.39	19.3	124	0.20	0.40	2,519	2,519	0.40	252	252	—	22,831	22,831	0.84	0.23	1.23	22,923
2043	9.85	9.75	19.3	124	0.20	0.40	2,733	2,733	0.39	273	273	—	22,820	22,820	0.84	0.50	1.79	22,911
2044	9.84	9.74	9.26	39.3	0.07	0.16	2,733	2,733	0.16	273	273	—	9,264	9,264	0.21	0.50	1.54	9,419
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2035	0.53	0.52	5.01	16.0	0.02	0.05	1,761	1,761	0.05	176	176	—	3,758	3,758	0.09	0.14	0.07	3,800
2036	3.32	3.30	24.7	166	0.26	0.53	3,067	3,068	0.53	306	307	—	30,460	30,460	1.15	0.31	0.10	30,582
2037	3.28	3.27	24.7	166	0.26	0.53	3,067	3,068	0.53	306	307	—	30,426	30,426	1.15	0.31	0.08	30,548
2038	3.27	3.25	24.7	165	0.26	0.53	3,067	3,068	0.53	306	307	—	30,407	30,407	1.15	0.31	0.07	30,527
2039	3.24	3.23	24.6	165	0.26	0.53	3,067	3,068	0.53	306	307	—	30,382	30,382	1.15	0.31	0.06	30,503
2040	3.22	3.12	24.6	165	0.26	0.53	3,067	3,068	0.53	306	307	—	30,362	30,362	1.14	0.31	0.05	30,483
2041	2.44	2.36	19.4	121	0.20	0.40	2,519	2,519	0.40	252	252	—	22,516	22,516	0.84	0.23	0.04	22,607
2042	2.44	2.35	19.4	121	0.20	0.40	2,519	2,519	0.40	252	252	—	22,502	22,502	0.84	0.23	0.03	22,593
2043	9.81	9.71	19.3	121	0.20	0.40	2,733	2,733	0.39	273	273	—	22,492	22,492	0.84	0.50	0.05	22,583
2044	9.75	9.71	9.57	36.9	0.07	0.16	2,733	2,733	0.16	273	273	—	9,008	9,008	0.21	0.50	0.04	9,162
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2035	0.39	0.38	3.57	12.1	0.02	0.03	1,241	1,241	0.03	124	124	—	2,750	2,750	0.06	0.10	0.85	2,781
2036	2.39	2.38	17.6	120	0.19	0.38	2,166	2,166	0.38	216	217	—	21,887	21,887	0.82	0.22	1.14	21,976

2037	2.37	2.36	17.6	119	0.19	0.38	2,162	2,163	0.38	216	216	—	21,855	21,855	0.82	0.22	0.99	21,942
2038	2.35	2.34	17.6	119	0.19	0.38	2,162	2,163	0.38	216	216	—	21,840	21,840	0.82	0.22	0.85	21,927
2039	2.33	2.32	17.5	119	0.19	0.38	2,162	2,163	0.38	216	216	—	21,821	21,821	0.82	0.22	0.73	21,908
2040	2.04	2.03	15.8	103	0.16	0.33	1,974	1,975	0.33	197	197	—	19,052	19,052	0.71	0.19	0.57	19,128
2041	1.75	1.70	13.9	87.3	0.14	0.28	1,775	1,776	0.28	177	178	—	16,180	16,180	0.60	0.17	0.44	16,245
2042	1.74	1.69	13.8	87.2	0.14	0.28	1,775	1,776	0.28	177	178	—	16,170	16,170	0.60	0.17	0.38	16,235
2043	4.38	4.32	10.3	57.0	0.10	0.20	1,851	1,851	0.20	185	185	—	11,328	11,328	0.37	0.26	0.44	11,416
2044	7.01	6.94	6.79	27.0	0.05	0.11	1,926	1,927	0.11	192	193	—	6,509	6,509	0.15	0.36	0.48	6,619
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2035	0.07	0.07	0.65	2.20	< 0.005	0.01	226	226	0.01	22.6	22.6	—	455	455	0.01	0.02	0.14	460
2036	0.44	0.43	3.22	21.8	0.03	0.07	395	395	0.07	39.5	39.5	—	3,624	3,624	0.14	0.04	0.19	3,638
2037	0.43	0.43	3.22	21.8	0.03	0.07	395	395	0.07	39.4	39.5	—	3,618	3,618	0.14	0.04	0.16	3,633
2038	0.43	0.43	3.20	21.7	0.03	0.07	395	395	0.07	39.4	39.5	—	3,616	3,616	0.14	0.04	0.14	3,630
2039	0.43	0.42	3.20	21.7	0.03	0.07	395	395	0.07	39.4	39.5	—	3,613	3,613	0.14	0.04	0.12	3,627
2040	0.37	0.37	2.87	18.9	0.03	0.06	360	360	0.06	36.0	36.0	—	3,154	3,154	0.12	0.03	0.09	3,167
2041	0.32	0.31	2.53	15.9	0.03	0.05	324	324	0.05	32.4	32.4	—	2,679	2,679	0.10	0.03	0.07	2,690
2042	0.32	0.31	2.52	15.9	0.03	0.05	324	324	0.05	32.4	32.4	—	2,677	2,677	0.10	0.03	0.06	2,688
2043	0.80	0.79	1.88	10.4	0.02	0.04	338	338	0.04	33.7	33.8	—	1,876	1,876	0.06	0.04	0.07	1,890
2044	1.28	1.27	1.24	4.92	0.01	0.02	352	352	0.02	35.1	35.1	—	1,078	1,078	0.02	0.06	0.08	1,096

3. Construction Emissions Details

3.1. Linear, Grubbing & Land Clearing (2035) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.21	0.21	3.83	12.3	0.02	0.03	—	0.03	0.03	—	0.03	—	1,757	1,757	0.07	0.01	—	1,763
Dust From Material Movement	—	—	—	—	—	—	0.42	0.42	—	0.04	0.04	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.21	0.21	3.83	12.3	0.02	0.03	—	0.03	0.03	—	0.03	—	1,757	1,757	0.07	0.01	—	1,763
Dust From Material Movement	—	—	—	—	—	—	0.42	0.42	—	0.04	0.04	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.15	2.74	8.76	0.01	0.02	—	0.02	0.02	—	0.02	—	1,255	1,255	0.05	0.01	—	1,259
Dust From Material Movement	—	—	—	—	—	—	0.30	0.30	—	0.03	0.03	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.50	1.60	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	208	208	0.01	< 0.005	—	208

Dust From Material Movement	—	—	—	—	—	—	0.05	0.05	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.40	0.35	0.24	6.18	0.00	0.00	1,553	1,553	0.00	155	155	—	1,490	1,490	0.01	0.01	2.05	1,495
Vendor	0.01	0.01	0.19	0.08	< 0.005	< 0.005	60.1	60.1	< 0.005	6.00	6.01	—	193	193	< 0.005	0.03	0.11	201
Hauling	0.02	0.01	0.62	0.16	< 0.005	0.01	147	147	0.01	14.7	14.7	—	542	542	0.01	0.09	0.60	569
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.30	0.29	0.29	3.46	0.00	0.00	1,553	1,553	0.00	155	155	—	1,264	1,264	0.02	0.01	0.05	1,266
Vendor	0.01	0.01	0.21	0.08	< 0.005	< 0.005	60.1	60.1	< 0.005	6.00	6.01	—	193	193	< 0.005	0.03	< 0.005	201
Hauling	0.02	0.01	0.68	0.17	< 0.005	0.01	147	147	0.01	14.7	14.7	—	543	543	0.01	0.09	0.02	569
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.22	0.22	0.21	3.13	0.00	0.00	1,095	1,095	0.00	109	109	—	969	969	0.01	0.01	0.63	972
Vendor	0.01	< 0.005	0.15	0.06	< 0.005	< 0.005	42.4	42.4	< 0.005	4.23	4.23	—	138	138	< 0.005	0.02	0.04	143
Hauling	0.01	0.01	0.47	0.12	< 0.005	0.01	104	104	0.01	10.4	10.4	—	388	388	< 0.005	0.06	0.18	406
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.04	0.57	0.00	0.00	200	200	0.00	19.9	19.9	—	160	160	< 0.005	< 0.005	0.10	161
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	7.73	7.73	< 0.005	0.77	0.77	—	22.8	22.8	< 0.005	< 0.005	0.01	23.7
Hauling	< 0.005	< 0.005	0.09	0.02	< 0.005	< 0.005	18.9	18.9	< 0.005	1.89	1.90	—	64.2	64.2	< 0.005	0.01	0.03	67.3

3.3. Linear, Grubbing & Land Clearing (2036) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.21	0.21	3.83	12.3	0.02	0.03	—	0.03	0.03	—	0.03	—	1,757	1,757	0.07	0.01	—	1,763
Dust From Material Movement	—	—	—	—	—	—	0.42	0.42	—	0.04	0.04	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.44	3.44	< 0.005	< 0.005	—	3.45
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.57	0.57	< 0.005	< 0.005	—	0.57

Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.29	0.29	0.24	3.24	0.00	0.00	1,553	1,553	0.00	155	155	—	1,251	1,251	0.01	0.01	0.05	1,253
Vendor	0.01	0.01	0.21	0.08	< 0.005	< 0.005	60.1	60.1	< 0.005	6.00	6.01	—	188	188	< 0.005	0.03	< 0.005	196
Hauling	0.02	0.01	0.67	0.17	< 0.005	0.01	147	147	0.01	14.7	14.7	—	536	536	0.01	0.09	0.01	562
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	3.00	3.00	0.00	0.30	0.30	—	2.63	2.63	< 0.005	< 0.005	< 0.005	2.63
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.12	0.12	< 0.005	0.01	0.01	—	0.37	0.37	< 0.005	< 0.005	< 0.005	0.38
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.28	0.28	< 0.005	0.03	0.03	—	1.05	1.05	< 0.005	< 0.005	< 0.005	1.10
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	0.55	0.55	0.00	0.05	0.05	—	0.44	0.44	< 0.005	< 0.005	< 0.005	0.44
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	—	0.06	0.06	< 0.005	< 0.005	< 0.005	0.06
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.01	—	0.17	0.17	< 0.005	< 0.005	< 0.005	0.18

3.5. Linear, Grading & Excavation (2036) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.75	2.75	23.7	160	0.26	0.52	—	0.52	0.52	—	0.52	—	27,611	27,611	1.12	0.22	—	27,706
Dust From Material Movement	—	—	—	—	—	—	3.45	3.45	—	0.37	0.37	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.75	2.75	23.7	160	0.26	0.52	—	0.52	0.52	—	0.52	—	27,611	27,611	1.12	0.22	—	27,706
Dust From Material Movement	—	—	—	—	—	—	3.45	3.45	—	0.37	0.37	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.97	1.97	16.9	114	0.18	0.37	—	0.37	0.37	—	0.37	—	19,722	19,722	0.80	0.16	—	19,790
Dust From Material Movement	—	—	—	—	—	—	2.46	2.46	—	0.27	0.27	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.36	0.36	3.09	20.8	0.03	0.07	—	0.07	0.07	—	0.07	—	3,265	3,265	0.13	0.03	—	3,276
Dust From Material Movement	—	—	—	—	—	—	0.45	0.45	—	0.05	0.05	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.63	0.63	0.45	10.9	0.00	0.00	2,915	2,915	0.00	291	291	—	2,768	2,768	0.02	0.01	3.34	2,776
Vendor	0.01	0.01	0.28	0.12	< 0.005	0.01	90.1	90.1	0.01	9.01	9.01	—	282	282	< 0.005	0.04	0.13	294
Hauling	0.01	0.01	0.24	0.06	< 0.005	0.01	58.9	58.9	0.01	5.89	5.89	—	214	214	< 0.005	0.03	0.21	225
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.54	0.54	0.45	6.08	0.00	0.00	2,915	2,915	0.00	291	291	—	2,348	2,348	0.02	0.01	0.09	2,353
Vendor	0.01	0.01	0.31	0.12	< 0.005	0.01	90.1	90.1	0.01	9.01	9.01	—	282	282	< 0.005	0.04	< 0.005	294
Hauling	0.01	0.01	0.27	0.07	< 0.005	0.01	58.9	58.9	0.01	5.89	5.89	—	214	214	< 0.005	0.03	0.01	225
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.41	0.40	0.32	5.52	0.00	0.00	2,055	2,055	0.00	205	205	—	1,800	1,800	0.02	0.01	1.03	1,805
Vendor	0.01	0.01	0.22	0.09	< 0.005	< 0.005	63.5	63.5	< 0.005	6.35	6.35	—	201	201	< 0.005	0.03	0.04	210
Hauling	0.01	< 0.005	0.19	0.05	< 0.005	< 0.005	41.5	41.5	< 0.005	4.15	4.15	—	153	153	< 0.005	0.02	0.07	161
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.06	1.01	0.00	0.00	375	375	0.00	37.4	37.4	—	298	298	< 0.005	< 0.005	0.17	299
Vendor	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	33.3	33.3	< 0.005	< 0.005	0.01	34.8
Hauling	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	7.58	7.58	< 0.005	0.76	0.76	—	25.3	25.3	< 0.005	< 0.005	0.01	26.6

3.7. Linear, Grading & Excavation (2037) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.75	2.75	23.7	160	0.26	0.52	—	0.52	0.52	—	0.52	—	27,611	27,611	1.12	0.22	—	27,706
Dust From Material Movement	—	—	—	—	—	—	3.45	3.45	—	0.37	0.37	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.75	2.75	23.7	160	0.26	0.52	—	0.52	0.52	—	0.52	—	27,611	27,611	1.12	0.22	—	27,706
Dust From Material Movement	—	—	—	—	—	—	3.45	3.45	—	0.37	0.37	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.97	1.97	16.9	114	0.18	0.37	—	0.37	0.37	—	0.37	—	19,722	19,722	0.80	0.16	—	19,790

Dust From Material Movement	—	—	—	—	—	—	2.46	2.46	—	0.27	0.27	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.36	0.36	3.09	20.8	0.03	0.07	—	0.07	0.07	—	0.07	—	3,265	3,265	0.13	0.03	—	3,276
Dust From Material Movement	—	—	—	—	—	—	0.45	0.45	—	0.05	0.05	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.60	0.60	0.37	10.3	0.00	0.00	2,915	2,915	0.00	291	291	—	2,741	2,741	0.02	0.01	2.91	2,748
Vendor	0.01	0.01	0.28	0.12	< 0.005	0.01	90.1	90.1	0.01	9.01	9.01	—	276	276	< 0.005	0.04	0.10	288
Hauling	0.01	0.01	0.24	0.06	< 0.005	0.01	58.9	58.9	0.01	5.89	5.89	—	212	212	< 0.005	0.03	0.18	222
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.51	0.50	0.45	5.75	0.00	0.00	2,915	2,915	0.00	291	291	—	2,325	2,325	0.02	0.01	0.08	2,330
Vendor	0.01	0.01	0.31	0.12	< 0.005	0.01	90.1	90.1	0.01	9.01	9.01	—	276	276	< 0.005	0.04	< 0.005	288
Hauling	0.01	0.01	0.26	0.06	< 0.005	0.01	58.9	58.9	0.01	5.89	5.89	—	212	212	< 0.005	0.03	< 0.005	222
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.39	0.38	0.32	5.24	0.00	0.00	2,055	2,055	0.00	205	205	—	1,783	1,783	0.01	0.01	0.90	1,787
Vendor	0.01	0.01	0.21	0.09	< 0.005	< 0.005	63.5	63.5	< 0.005	6.35	6.35	—	197	197	< 0.005	0.03	0.03	205

Hauling	0.01	< 0.005	0.19	0.05	< 0.005	< 0.005	41.5	41.5	< 0.005	4.15	4.15	—	151	151	< 0.005	0.02	0.06	159
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.06	0.96	0.00	0.00	375	375	0.00	37.4	37.4	—	295	295	< 0.005	< 0.005	0.15	296
Vendor	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	32.6	32.6	< 0.005	< 0.005	0.01	34.0
Hauling	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	7.58	7.58	< 0.005	0.76	0.76	—	25.1	25.1	< 0.005	< 0.005	0.01	26.2

3.9. Linear, Grading & Excavation (2038) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.75	2.75	23.7	160	0.26	0.52	—	0.52	0.52	—	0.52	—	27,611	27,611	1.12	0.22	—	27,706
Dust From Material Movement	—	—	—	—	—	—	3.45	3.45	—	0.37	0.37	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.75	2.75	23.7	160	0.26	0.52	—	0.52	0.52	—	0.52	—	27,611	27,611	1.12	0.22	—	27,706
Dust From Material Movement	—	—	—	—	—	—	3.45	3.45	—	0.37	0.37	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.97	1.97	16.9	114	0.18	0.37	—	0.37	0.37	—	0.37	—	19,722	19,722	0.80	0.16	—	19,790
Dust From Material Movement	—	—	—	—	—	—	2.46	2.46	—	0.27	0.27	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.36	0.36	3.09	20.8	0.03	0.07	—	0.07	0.07	—	0.07	—	3,265	3,265	0.13	0.03	—	3,276
Dust From Material Movement	—	—	—	—	—	—	0.45	0.45	—	0.05	0.05	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.57	0.56	0.36	9.95	0.00	0.00	2,915	2,915	0.00	291	291	—	2,725	2,725	0.02	0.01	2.52	2,733
Vendor	0.01	0.01	0.27	0.11	< 0.005	0.01	90.1	90.1	0.01	9.01	9.01	—	270	270	< 0.005	0.04	0.08	281
Hauling	0.01	0.01	0.24	0.06	< 0.005	0.01	58.9	58.9	0.01	5.89	5.89	—	210	210	< 0.005	0.03	0.16	220
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.50	0.49	0.45	5.52	0.00	0.00	2,915	2,915	0.00	291	291	—	2,312	2,312	0.02	0.01	0.07	2,317

Vendor	0.01	0.01	0.30	0.12	< 0.005	0.01	90.1	90.1	0.01	9.01	9.01	—	271	271	< 0.005	0.04	< 0.005	282
Hauling	0.01	0.01	0.26	0.06	< 0.005	0.01	58.9	58.9	0.01	5.89	5.89	—	210	210	< 0.005	0.03	< 0.005	220
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.37	0.36	0.25	5.02	0.00	0.00	2,055	2,055	0.00	205	205	—	1,773	1,773	0.01	0.01	0.78	1,777
Vendor	0.01	0.01	0.21	0.08	< 0.005	< 0.005	63.5	63.5	< 0.005	6.35	6.35	—	193	193	< 0.005	0.03	0.02	201
Hauling	0.01	< 0.005	0.18	0.05	< 0.005	< 0.005	41.5	41.5	< 0.005	4.15	4.15	—	150	150	< 0.005	0.02	0.05	157
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.05	0.92	0.00	0.00	375	375	0.00	37.4	37.4	—	294	294	< 0.005	< 0.005	0.13	294
Vendor	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	32.0	32.0	< 0.005	< 0.005	< 0.005	33.3
Hauling	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	7.58	7.58	< 0.005	0.76	0.76	—	24.9	24.9	< 0.005	< 0.005	0.01	26.0

3.11. Linear, Grading & Excavation (2039) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.75	2.75	23.7	160	0.26	0.52	—	0.52	0.52	—	0.52	—	27,611	27,611	1.12	0.22	—	27,706
Dust From Material Movement	—	—	—	—	—	—	3.45	3.45	—	0.37	0.37	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	2.75	2.75	23.7	160	0.26	0.52	—	0.52	0.52	—	0.52	—	27,611	27,611	1.12	0.22	—	27,706
Dust From Material Movement	—	—	—	—	—	—	3.45	3.45	—	0.37	0.37	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	1.97	1.97	16.9	114	0.18	0.37	—	0.37	0.37	—	0.37	—	19,722	19,722	0.80	0.16	—	19,790
Dust From Material Movement	—	—	—	—	—	—	2.46	2.46	—	0.27	0.27	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.36	0.36	3.09	20.8	0.03	0.07	—	0.07	0.07	—	0.07	—	3,265	3,265	0.13	0.03	—	3,276
Dust From Material Movement	—	—	—	—	—	—	0.45	0.45	—	0.05	0.05	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.54	0.53	0.36	9.47	0.00	0.00	2,915	2,915	0.00	291	291	—	2,704	2,704	0.02	0.01	2.16	2,710
Vendor	0.01	0.01	0.27	0.11	< 0.005	0.01	90.1	90.1	0.01	9.01	9.01	—	265	265	< 0.005	0.04	0.06	277

Hauling	0.01	0.01	0.24	0.06	< 0.005	0.01	58.9	58.9	0.01	5.89	5.89	—	209	209	< 0.005	0.03	0.14	219
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.47	0.46	0.36	5.30	0.00	0.00	2,915	2,915	0.00	291	291	—	2,294	2,294	0.02	0.01	0.06	2,299
Vendor	0.01	0.01	0.30	0.12	< 0.005	0.01	90.1	90.1	0.01	9.01	9.01	—	266	266	< 0.005	0.04	< 0.005	277
Hauling	0.01	0.01	0.26	0.07	< 0.005	0.01	58.9	58.9	0.01	5.89	5.89	—	209	209	< 0.005	0.03	< 0.005	219
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.35	0.35	0.25	4.80	0.00	0.00	2,055	2,055	0.00	205	205	—	1,759	1,759	0.01	0.01	0.67	1,763
Vendor	0.01	0.01	0.21	0.08	< 0.005	< 0.005	63.5	63.5	< 0.005	6.35	6.35	—	190	190	< 0.005	0.03	0.02	198
Hauling	0.01	< 0.005	0.18	0.05	< 0.005	< 0.005	41.5	41.5	< 0.005	4.15	4.15	—	149	149	< 0.005	0.02	0.04	156
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.05	0.88	0.00	0.00	375	375	0.00	37.4	37.4	—	291	291	< 0.005	< 0.005	0.11	292
Vendor	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	31.4	31.4	< 0.005	< 0.005	< 0.005	32.7
Hauling	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	7.58	7.58	< 0.005	0.76	0.76	—	24.7	24.7	< 0.005	< 0.005	0.01	25.9

3.13. Linear, Grading & Excavation (2040) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.75	2.75	23.7	160	0.26	0.52	—	0.52	0.52	—	0.52	—	27,611	27,611	1.12	0.22	—	27,706
Dust From Material Movement	—	—	—	—	—	—	3.45	3.45	—	0.37	0.37	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.75	2.75	23.7	160	0.26	0.52	—	0.52	0.52	—	0.52	—	27,611	27,611	1.12	0.22	—	27,706
Dust From Material Movement	—	—	—	—	—	—	3.45	3.45	—	0.37	0.37	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.99	0.99	8.48	57.2	0.09	0.19	—	0.19	0.19	—	0.19	—	9,888	9,888	0.40	0.08	—	9,922
Dust From Material Movement	—	—	—	—	—	—	1.23	1.23	—	0.13	0.13	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.18	0.18	1.55	10.4	0.02	0.03	—	0.03	0.03	—	0.03	—	1,637	1,637	0.07	0.01	—	1,643
Dust From Material Movement	—	—	—	—	—	—	0.23	0.23	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.51	0.50	0.36	9.17	0.00	0.00	2,915	2,915	0.00	291	291	—	2,684	2,684	0.02	0.01	1.86	2,691
Vendor	0.01	0.01	0.27	0.11	< 0.005	0.01	90.1	90.1	0.01	9.01	9.01	—	261	261	< 0.005	0.04	0.04	272
Hauling	0.01	0.01	0.24	0.06	< 0.005	0.01	58.9	58.9	0.01	5.89	5.89	—	207	207	< 0.005	0.03	0.12	217
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.45	0.35	0.36	5.08	0.00	0.00	2,915	2,915	0.00	291	291	—	2,278	2,278	0.02	0.01	0.05	2,283
Vendor	0.01	0.01	0.29	0.12	< 0.005	0.01	90.1	90.1	0.01	9.01	9.01	—	261	261	< 0.005	0.04	< 0.005	272
Hauling	0.01	0.01	0.26	0.06	< 0.005	0.01	58.9	58.9	0.01	5.89	5.89	—	208	208	< 0.005	0.03	< 0.005	217
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.16	0.16	0.13	2.33	0.00	0.00	1,030	1,030	0.00	103	103	—	876	876	0.01	0.01	0.29	878
Vendor	< 0.005	< 0.005	0.10	0.04	< 0.005	< 0.005	31.9	31.9	< 0.005	3.18	3.18	—	93.5	93.5	< 0.005	0.01	0.01	97.5
Hauling	< 0.005	< 0.005	0.09	0.02	< 0.005	< 0.005	20.8	20.8	< 0.005	2.08	2.08	—	74.3	74.3	< 0.005	0.01	0.02	77.8
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.43	0.00	0.00	188	188	0.00	18.8	18.8	—	145	145	< 0.005	< 0.005	0.05	145
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	5.81	5.81	< 0.005	0.58	0.58	—	15.5	15.5	< 0.005	< 0.005	< 0.005	16.1
Hauling	< 0.005	< 0.005	0.02	< 0.005	< 0.005	< 0.005	3.80	3.80	< 0.005	0.38	0.38	—	12.3	12.3	< 0.005	< 0.005	< 0.005	12.9

3.15. Linear, Drainage, Utilities, & Sub-Grade (2040) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	2.07	2.07	18.7	117	0.19	0.39	—	0.39	0.39	—	0.39	—	20,274	20,274	0.82	0.16	—	20,343
Dust From Material Movement	—	—	—	—	—	—	2.48	2.48	—	0.27	0.27	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.07	2.07	18.7	117	0.19	0.39	—	0.39	0.39	—	0.39	—	20,274	20,274	0.82	0.16	—	20,343
Dust From Material Movement	—	—	—	—	—	—	2.48	2.48	—	0.27	0.27	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.74	0.74	6.69	41.9	0.07	0.14	—	0.14	0.14	—	0.14	—	7,260	7,260	0.29	0.06	—	7,285
Dust From Material Movement	—	—	—	—	—	—	0.89	0.89	—	0.10	0.10	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.14	1.22	7.64	0.01	0.03	—	0.03	0.03	—	0.03	—	1,202	1,202	0.05	0.01	—	1,206

Dust From Material Movement	—	—	—	—	—	—	0.16	0.16	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.42	0.41	0.29	7.54	0.00	0.00	2,397	2,397	0.00	239	239	—	2,208	2,208	0.02	0.01	1.53	2,213
Vendor	0.01	0.01	0.18	0.07	< 0.005	< 0.005	60.1	60.1	< 0.005	6.00	6.01	—	174	174	< 0.005	0.02	0.03	181
Hauling	0.01	0.01	0.24	0.06	< 0.005	0.01	58.9	58.9	0.01	5.89	5.89	—	207	207	< 0.005	0.03	0.12	217
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.37	0.29	0.29	4.18	0.00	0.00	2,397	2,397	0.00	239	239	—	1,874	1,874	0.02	0.01	0.04	1,878
Vendor	0.01	0.01	0.19	0.08	< 0.005	< 0.005	60.1	60.1	< 0.005	6.00	6.01	—	174	174	< 0.005	0.02	< 0.005	182
Hauling	0.01	0.01	0.26	0.06	< 0.005	0.01	58.9	58.9	0.01	5.89	5.89	—	208	208	< 0.005	0.03	< 0.005	217
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.14	0.13	0.10	1.92	0.00	0.00	847	847	0.00	84.6	84.6	—	720	720	0.01	< 0.005	0.24	722
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	21.2	21.2	< 0.005	2.12	2.12	—	62.3	62.3	< 0.005	0.01	< 0.005	65.0
Hauling	< 0.005	< 0.005	0.09	0.02	< 0.005	< 0.005	20.8	20.8	< 0.005	2.08	2.08	—	74.3	74.3	< 0.005	0.01	0.02	77.8
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.35	0.00	0.00	155	155	0.00	15.4	15.4	—	119	119	< 0.005	< 0.005	0.04	119
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	3.88	3.88	< 0.005	0.39	0.39	—	10.3	10.3	< 0.005	< 0.005	< 0.005	10.8
Hauling	< 0.005	< 0.005	0.02	< 0.005	< 0.005	< 0.005	3.80	3.80	< 0.005	0.38	0.38	—	12.3	12.3	< 0.005	< 0.005	< 0.005	12.9

3.17. Linear, Drainage, Utilities, & Sub-Grade (2041) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.07	2.07	18.7	117	0.19	0.39	—	0.39	0.39	—	0.39	—	20,274	20,274	0.82	0.16	—	20,343
Dust From Material Movement	—	—	—	—	—	—	2.48	2.48	—	0.27	0.27	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.07	2.07	18.7	117	0.19	0.39	—	0.39	0.39	—	0.39	—	20,274	20,274	0.82	0.16	—	20,343
Dust From Material Movement	—	—	—	—	—	—	2.48	2.48	—	0.27	0.27	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.48	1.48	13.3	83.5	0.14	0.28	—	0.28	0.28	—	0.28	—	14,481	14,481	0.59	0.12	—	14,531
Dust From Material Movement	—	—	—	—	—	—	1.77	1.77	—	0.19	0.19	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.27	0.27	2.44	15.2	0.03	0.05	—	0.05	0.05	—	0.05	—	2,398	2,398	0.10	0.02	—	2,406
Dust From Material Movement	—	—	—	—	—	—	0.32	0.32	—	0.03	0.03	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.40	0.39	0.22	7.23	0.00	0.00	2,397	2,397	0.00	239	239	—	2,194	2,194	0.01	0.01	1.31	2,199
Vendor	0.01	0.01	0.18	0.07	< 0.005	< 0.005	60.1	60.1	< 0.005	6.00	6.01	—	171	171	< 0.005	0.02	0.02	179
Hauling	0.01	0.01	0.24	0.06	< 0.005	0.01	58.9	58.9	0.01	5.89	5.89	—	206	206	< 0.005	0.03	0.11	216
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.36	0.28	0.29	4.01	0.00	0.00	2,397	2,397	0.00	239	239	—	1,862	1,862	0.02	0.01	0.03	1,866
Vendor	0.01	0.01	0.19	0.08	< 0.005	< 0.005	60.1	60.1	< 0.005	6.00	6.01	—	172	172	< 0.005	0.02	< 0.005	179
Hauling	0.01	0.01	0.26	0.06	< 0.005	0.01	58.9	58.9	0.01	5.89	5.89	—	207	207	< 0.005	0.03	< 0.005	216
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.26	0.21	0.20	3.66	0.00	0.00	1,690	1,690	0.00	169	169	—	1,427	1,427	0.01	0.01	0.40	1,431
Vendor	0.01	< 0.005	0.13	0.05	< 0.005	< 0.005	42.4	42.4	< 0.005	4.23	4.23	—	122	122	< 0.005	0.02	0.01	128
Hauling	0.01	< 0.005	0.18	0.04	< 0.005	< 0.005	41.5	41.5	< 0.005	4.15	4.15	—	147	147	< 0.005	0.02	0.03	155
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.04	0.67	0.00	0.00	308	308	0.00	30.8	30.8	—	236	236	< 0.005	< 0.005	0.07	237

Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	7.73	7.73	< 0.005	0.77	0.77	—	20.3	20.3	< 0.005	< 0.005	< 0.005	21.2
Hauling	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	7.58	7.58	< 0.005	0.76	0.76	—	24.4	24.4	< 0.005	< 0.005	0.01	25.6

3.19. Linear, Drainage, Utilities, & Sub-Grade (2042) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.07	2.07	18.7	117	0.19	0.39	—	0.39	0.39	—	0.39	—	20,274	20,274	0.82	0.16	—	20,343
Dust From Material Movement	—	—	—	—	—	—	2.48	2.48	—	0.27	0.27	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.07	2.07	18.7	117	0.19	0.39	—	0.39	0.39	—	0.39	—	20,274	20,274	0.82	0.16	—	20,343
Dust From Material Movement	—	—	—	—	—	—	2.48	2.48	—	0.27	0.27	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	1.48	1.48	13.3	83.5	0.14	0.28	—	0.28	0.28	—	0.28	—	14,481	14,481	0.59	0.12	—	14,531
Dust From Material Movement	—	—	—	—	—	—	1.77	1.77	—	0.19	0.19	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.27	0.27	2.44	15.2	0.03	0.05	—	0.05	0.05	—	0.05	—	2,398	2,398	0.10	0.02	—	2,406
Dust From Material Movement	—	—	—	—	—	—	0.32	0.32	—	0.03	0.03	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.38	0.31	0.22	6.99	0.00	0.00	2,397	2,397	0.00	239	239	—	2,181	2,181	0.01	0.01	1.12	2,186
Vendor	0.01	0.01	0.17	0.07	< 0.005	< 0.005	60.1	60.1	< 0.005	6.00	6.01	—	169	169	< 0.005	0.02	0.01	177
Hauling	0.01	0.01	0.23	0.06	< 0.005	0.01	58.9	58.9	0.01	5.89	5.89	—	205	205	< 0.005	0.03	0.09	215
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.35	0.27	0.29	3.91	0.00	0.00	2,397	2,397	0.00	239	239	—	1,852	1,852	0.02	0.01	0.03	1,856
Vendor	0.01	0.01	0.19	0.08	< 0.005	< 0.005	60.1	60.1	< 0.005	6.00	6.01	—	169	169	< 0.005	0.02	< 0.005	177
Hauling	0.01	0.01	0.26	0.06	< 0.005	0.01	58.9	58.9	0.01	5.89	5.89	—	206	206	< 0.005	0.03	< 0.005	216
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.25	0.20	0.15	3.54	0.00	0.00	1,690	1,690	0.00	169	169	—	1,419	1,419	0.01	0.01	0.34	1,422

Vendor	0.01	< 0.005	0.13	0.05	< 0.005	< 0.005	42.4	42.4	< 0.005	4.23	4.23	—	121	121	< 0.005	0.02	< 0.005	126
Hauling	0.01	< 0.005	0.18	0.04	< 0.005	< 0.005	41.5	41.5	< 0.005	4.15	4.15	—	147	147	< 0.005	0.02	0.03	154
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.03	0.65	0.00	0.00	308	308	0.00	30.8	30.8	—	235	235	< 0.005	< 0.005	0.06	235
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	7.73	7.73	< 0.005	0.77	0.77	—	20.0	20.0	< 0.005	< 0.005	< 0.005	20.9
Hauling	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	7.58	7.58	< 0.005	0.76	0.76	—	24.3	24.3	< 0.005	< 0.005	< 0.005	25.5

3.21. Linear, Drainage, Utilities, & Sub-Grade (2043) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.07	2.07	18.7	117	0.19	0.39	—	0.39	0.39	—	0.39	—	20,274	20,274	0.82	0.16	—	20,343
Dust From Material Movement	—	—	—	—	—	—	2.48	2.48	—	0.27	0.27	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.07	2.07	18.7	117	0.19	0.39	—	0.39	0.39	—	0.39	—	20,274	20,274	0.82	0.16	—	20,343

Dust From Material Movement	—	—	—	—	—	—	2.48	2.48	—	0.27	0.27	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.74	0.74	6.66	41.6	0.07	0.14	—	0.14	0.14	—	0.14	—	7,221	7,221	0.29	0.06	—	7,246
Dust From Material Movement	—	—	—	—	—	—	0.88	0.88	—	0.10	0.10	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.13	1.21	7.60	0.01	0.03	—	0.03	0.03	—	0.03	—	1,195	1,195	0.05	0.01	—	1,200
Dust From Material Movement	—	—	—	—	—	—	0.16	0.16	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.37	0.29	0.21	6.83	0.00	0.00	2,397	2,397	0.00	239	239	—	2,170	2,170	0.01	0.01	0.95	2,175
Vendor	0.01	0.01	0.17	0.07	< 0.005	< 0.005	60.1	60.1	< 0.005	6.00	6.01	—	167	167	< 0.005	0.02	0.01	175
Hauling	0.01	0.01	0.23	0.06	< 0.005	0.01	58.9	58.9	0.01	5.89	5.89	—	205	205	< 0.005	0.03	0.08	215

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.34	0.26	0.21	3.82	0.00	0.00	2,397	2,397	0.00	239	239	—	1,843	1,843	0.02	0.01	0.02	1,846
Vendor	0.01	0.01	0.19	0.08	< 0.005	< 0.005	60.1	60.1	< 0.005	6.00	6.01	—	167	167	< 0.005	0.02	< 0.005	175
Hauling	0.01	0.01	0.26	0.06	< 0.005	0.01	58.9	58.9	0.01	5.89	5.89	—	205	205	< 0.005	0.03	< 0.005	215
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.09	0.07	1.73	0.00	0.00	843	843	0.00	84.1	84.1	—	704	704	< 0.005	< 0.005	0.15	706
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	21.1	21.1	< 0.005	2.11	2.11	—	59.6	59.6	< 0.005	0.01	< 0.005	62.2
Hauling	< 0.005	< 0.005	0.09	0.02	< 0.005	< 0.005	20.7	20.7	< 0.005	2.07	2.07	—	73.0	73.0	< 0.005	0.01	0.01	76.5
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.32	0.00	0.00	154	154	0.00	15.4	15.4	—	117	117	< 0.005	< 0.005	0.02	117
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	3.85	3.85	< 0.005	0.39	0.39	—	9.86	9.86	< 0.005	< 0.005	< 0.005	10.3
Hauling	< 0.005	< 0.005	0.02	< 0.005	< 0.005	< 0.005	3.78	3.78	< 0.005	0.38	0.38	—	12.1	12.1	< 0.005	< 0.005	< 0.005	12.7

3.23. Linear, Paving (2043) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	0.50	5.89	33.1	0.04	0.09	—	0.09	0.09	—	0.09	—	4,722	4,722	0.19	0.04	—	4,738
Architectural Coatings	8.94	8.94	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	0.50	5.89	33.1	0.04	0.09	—	0.09	0.09	—	0.09	—	4,722	4,722	0.19	0.04	—	4,738
Architectural Coatings	8.94	8.94	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.18	0.18	2.11	11.8	0.02	0.03	—	0.03	0.03	—	0.03	—	1,691	1,691	0.07	0.01	—	1,697
Architectural Coatings	3.20	3.20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.38	2.16	< 0.005	0.01	—	0.01	0.01	—	0.01	—	280	280	0.01	< 0.005	—	281
Architectural Coatings	0.58	0.58	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.29	0.23	0.17	5.43	0.00	0.00	1,907	1,907	0.00	190	190	—	1,726	1,726	0.01	0.01	0.75	1,730
Vendor	0.01	0.01	0.17	0.07	< 0.005	< 0.005	60.1	60.1	< 0.005	6.00	6.01	—	167	167	< 0.005	0.02	0.01	175
Hauling	0.11	0.07	3.03	0.81	0.02	0.07	766	766	0.07	76.5	76.6	—	2,663	2,663	0.01	0.43	1.03	2,791
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.27	0.20	0.17	3.04	0.00	0.00	1,907	1,907	0.00	190	190	—	1,466	1,466	0.01	0.01	0.02	1,469
Vendor	0.01	0.01	0.19	0.08	< 0.005	< 0.005	60.1	60.1	< 0.005	6.00	6.01	—	167	167	< 0.005	0.02	< 0.005	175
Hauling	0.10	0.07	3.35	0.83	0.02	0.07	766	766	0.07	76.5	76.6	—	2,665	2,665	< 0.005	0.43	0.03	2,793
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.08	0.06	1.39	0.00	0.00	674	674	0.00	67.3	67.3	—	563	563	< 0.005	< 0.005	0.12	564
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	21.2	21.2	< 0.005	2.12	2.12	—	59.9	59.9	< 0.005	0.01	< 0.005	62.5
Hauling	0.04	0.03	1.18	0.29	0.01	0.02	271	271	0.02	27.1	27.1	—	954	954	< 0.005	0.15	0.16	1,000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.01	0.25	0.00	0.00	123	123	0.00	12.3	12.3	—	93.2	93.2	< 0.005	< 0.005	0.02	93.4
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	3.88	3.88	< 0.005	0.39	0.39	—	9.91	9.91	< 0.005	< 0.005	< 0.005	10.4
Hauling	0.01	< 0.005	0.21	0.05	< 0.005	< 0.005	49.4	49.4	< 0.005	4.94	4.94	—	158	158	< 0.005	0.03	0.03	166

3.25. Linear, Paving (2044) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.50	0.50	5.89	33.1	0.04	0.09	—	0.09	0.09	—	0.09	—	4,722	4,722	0.19	0.04	—	4,738
Architectural Coatings	8.94	8.94	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	0.50	5.89	33.1	0.04	0.09	—	0.09	0.09	—	0.09	—	4,722	4,722	0.19	0.04	—	4,738
Architectural Coatings	8.94	8.94	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.35	0.35	4.21	23.6	0.03	0.06	—	0.06	0.06	—	0.06	—	3,373	3,373	0.14	0.03	—	3,384
Architectural Coatings	6.39	6.39	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	0.77	4.31	0.01	0.01	—	0.01	0.01	—	0.01	—	558	558	0.02	< 0.005	—	560

Architect Coatings	1.17	1.17	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.29	0.23	0.17	5.31	0.00	0.00	1,907	1,907	0.00	190	190	—	1,719	1,719	0.01	0.01	0.64	1,723
Vendor	0.01	0.01	0.17	0.07	< 0.005	< 0.005	60.1	60.1	< 0.005	6.00	6.01	—	165	165	< 0.005	0.02	0.01	173
Hauling	0.11	0.07	3.03	0.81	0.02	0.07	766	766	0.07	76.5	76.6	—	2,656	2,656	0.01	0.43	0.90	2,784
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.20	0.20	0.17	2.97	0.00	0.00	1,907	1,907	0.00	190	190	—	1,460	1,460	0.01	0.01	0.02	1,463
Vendor	0.01	0.01	0.19	0.08	< 0.005	< 0.005	60.1	60.1	< 0.005	6.00	6.01	—	166	166	< 0.005	0.02	< 0.005	173
Hauling	0.10	0.07	3.33	0.84	0.02	0.07	766	766	0.07	76.5	76.6	—	2,659	2,659	< 0.005	0.43	0.02	2,786
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.19	0.15	0.12	2.71	0.00	0.00	1,344	1,344	0.00	134	134	—	1,119	1,119	0.01	0.01	0.20	1,121
Vendor	0.01	< 0.005	0.13	0.05	< 0.005	< 0.005	42.4	42.4	< 0.005	4.23	4.23	—	118	118	< 0.005	0.02	< 0.005	124
Hauling	0.07	0.05	2.33	0.59	0.02	0.05	540	540	0.05	54.0	54.0	—	1,898	1,898	< 0.005	0.31	0.28	1,989
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.50	0.00	0.00	245	245	0.00	24.5	24.5	—	185	185	< 0.005	< 0.005	0.03	186
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	7.73	7.73	< 0.005	0.77	0.77	—	19.6	19.6	< 0.005	< 0.005	< 0.005	20.4
Hauling	0.01	0.01	0.43	0.11	< 0.005	0.01	98.5	98.5	0.01	9.85	9.86	—	314	314	< 0.005	0.05	0.05	329

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Remove	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Linear, Grubbing & Land Clearing	Linear, Grubbing & Land Clearing	1/1/2035	1/1/2036	5.00	261	—
Linear, Grading & Excavation	Linear, Grading & Excavation	1/2/2036	7/1/2040	5.00	1,173	—
Linear, Drainage, Utilities, & Sub-Grade	Linear, Drainage, Utilities, & Sub-Grade	7/2/2040	7/1/2043	5.00	782	—
Linear, Paving	Linear, Paving	7/2/2043	12/30/2044	5.00	391	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Linear, Grubbing & Land Clearing	Crawler Tractors	Diesel	Tier 4 Final	3.00	8.00	87.0	0.43
Linear, Grubbing & Land Clearing	Excavators	Diesel	Tier 4 Final	5.00	8.00	36.0	0.38
Linear, Grubbing & Land Clearing	Signal Boards	Electric	Average	37.0	8.00	6.00	0.82
Linear, Grading & Excavation	Crawler Tractors	Diesel	Tier 4 Final	4.00	8.00	87.0	0.43
Linear, Grading & Excavation	Excavators	Diesel	Tier 4 Final	10.0	8.00	36.0	0.38

Linear, Grading & Excavation	Graders	Diesel	Tier 4 Final	5.00	8.00	148	0.41
Linear, Grading & Excavation	Rollers	Diesel	Tier 4 Final	7.00	8.00	36.0	0.38
Linear, Grading & Excavation	Rubber Tired Loaders	Diesel	Tier 4 Final	5.00	8.00	150	0.36
Linear, Grading & Excavation	Scrapers	Diesel	Tier 4 Final	8.00	8.00	423	0.48
Linear, Grading & Excavation	Signal Boards	Electric	Average	37.0	8.00	6.00	0.82
Linear, Grading & Excavation	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	8.00	8.00	84.0	0.37
Linear, Grading & Excavation	Cranes	Diesel	Tier 4 Final	1.00	8.00	367	0.29
Linear, Drainage, Utilities, & Sub-Grade	Air Compressors	Diesel	Tier 4 Final	3.00	8.00	37.0	0.48
Linear, Drainage, Utilities, & Sub-Grade	Generator Sets	Diesel	Tier 4 Final	3.00	8.00	25.0	0.74
Linear, Drainage, Utilities, & Sub-Grade	Graders	Diesel	Tier 4 Final	4.00	8.00	148	0.41
Linear, Drainage, Utilities, & Sub-Grade	Plate Compactors	Diesel	Tier 4 Final	3.00	8.00	25.0	0.43
Linear, Drainage, Utilities, & Sub-Grade	Pumps	Diesel	Tier 4 Final	3.00	8.00	25.0	0.74
Linear, Drainage, Utilities, & Sub-Grade	Rough Terrain Forklifts	Diesel	Tier 4 Final	3.00	8.00	96.0	0.40
Linear, Drainage, Utilities, & Sub-Grade	Scrapers	Diesel	Tier 4 Final	7.00	8.00	423	0.48
Linear, Drainage, Utilities, & Sub-Grade	Signal Boards	Electric	Average	37.0	8.00	6.00	0.82
Linear, Drainage, Utilities, & Sub-Grade	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	7.00	8.00	84.0	0.37
Linear, Paving	Pavers	Diesel	Tier 4 Final	3.00	8.00	81.0	0.42
Linear, Paving	Paving Equipment	Diesel	Tier 4 Final	3.00	8.00	89.0	0.36

Linear, Paving	Rollers	Diesel	Tier 4 Final	6.00	8.00	36.0	0.38
Linear, Paving	Signal Boards	Electric	Average	37.0	8.00	6.00	0.82
Linear, Paving	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	7.00	8.00	84.0	0.37

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Linear, Grubbing & Land Clearing	—	—	—	—
Linear, Grubbing & Land Clearing	Worker	114	18.5	LDA,LDT1,LDT2
Linear, Grubbing & Land Clearing	Vendor	8.00	10.2	HHDT,MHDT
Linear, Grubbing & Land Clearing	Hauling	10.0	20.0	HHDT
Linear, Grubbing & Land Clearing	Onsite truck	—	—	HHDT
Linear, Grading & Excavation	—	—	—	—
Linear, Grading & Excavation	Worker	214	18.5	LDA,LDT1,LDT2
Linear, Grading & Excavation	Vendor	12.0	10.2	HHDT,MHDT
Linear, Grading & Excavation	Hauling	4.00	20.0	HHDT
Linear, Grading & Excavation	Onsite truck	—	—	HHDT
Linear, Drainage, Utilities, & Sub-Grade	—	—	—	—
Linear, Drainage, Utilities, & Sub-Grade	Worker	176	18.5	LDA,LDT1,LDT2
Linear, Drainage, Utilities, & Sub-Grade	Vendor	8.00	10.2	HHDT,MHDT
Linear, Drainage, Utilities, & Sub-Grade	Hauling	4.00	20.0	HHDT
Linear, Drainage, Utilities, & Sub-Grade	Onsite truck	—	—	HHDT
Linear, Paving	—	—	—	—

Linear, Paving	Worker	140	18.5	LDA,LDT1,LDT2
Linear, Paving	Vendor	8.00	10.2	HHDT,MHDT
Linear, Paving	Hauling	52.0	20.0	HHDT
Linear, Paving	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Control Strategies Applied	PM10 Reduction	PM2.5 Reduction
Water unpaved roads twice daily	74%	74%
Limit vehicle speeds on unpaved roads to 25 mph	44%	44%
Sweep paved roads once per month	9%	9%

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Linear, Paving	0.00	0.00	0.00	0.00	502,622

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Linear, Grubbing & Land Clearing	—	20,000	175	0.00	—
Linear, Grading & Excavation	—	20,000	175	0.00	—
Linear, Drainage, Utilities, & Sub-Grade	—	20,000	175	0.00	—

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	3	74%	74%
Water Demolished Area	2	36%	36%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Road Construction	95.3	100%
Road Widening	96.3	100%
Bridge/Overpass Construction	0.69	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2035	1,086	457	0.03	< 0.005
2036	2,172	457	0.03	< 0.005
2037	1,086	457	0.03	< 0.005
2038	1,086	457	0.03	< 0.005
2039	1,086	457	0.03	< 0.005
2040	2,172	457	0.03	< 0.005
2041	1,086	457	0.03	< 0.005
2042	1,086	457	0.03	< 0.005
2043	2,172	457	0.03	< 0.005
2044	1,086	457	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	32.8	annual days of extreme heat
Extreme Precipitation	0.00	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.19	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A

Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	11.6
AQ-PM	19.1
AQ-DPM	9.09
Drinking Water	30.6
Lead Risk Housing	50.8
Pesticides	90.5
Toxic Releases	7.58
Traffic	3.06
Effect Indicators	—
CleanUp Sites	74.2
Groundwater	77.9
Haz Waste Facilities/Generators	93.2
Impaired Water Bodies	100.0
Solid Waste	86.5

Sensitive Population	—
Asthma	87.6
Cardio-vascular	83.2
Low Birth Weights	26.9
Socioeconomic Factor Indicators	—
Education	82.7
Housing	51.4
Linguistic	88.8
Poverty	94.9
Unemployment	99.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	16.66880534
Employed	7.173104068
Median HI	5.299627871
Education	—
Bachelor's or higher	5.017323239
High school enrollment	16.8741178
Preschool enrollment	68.89516233
Transportation	—
Auto Access	18.40112922
Active commuting	51.10997049
Social	—
2-parent households	13.28114975
Voting	16.79712563

Neighborhood	—
Alcohol availability	70.25535737
Park access	33.85089183
Retail density	4.311561658
Supermarket access	49.58295907
Tree canopy	0.782753753
Housing	—
Homeownership	38.3036058
Housing habitability	30.96368536
Low-inc homeowner severe housing cost burden	26.76761196
Low-inc renter severe housing cost burden	52.89362248
Uncrowded housing	38.58591043
Health Outcomes	—
Insured adults	21.00603105
Arthritis	0.0
Asthma ER Admissions	30.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	41.7
Cognitively Disabled	50.3
Physically Disabled	19.5
Heart Attack ER Admissions	46.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0

Obesity	0.0
Pedestrian Injuries	54.3
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	14.1
Elderly	42.0
English Speaking	18.7
Foreign-born	65.3
Outdoor Workers	5.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	85.8
Traffic Density	4.9
Traffic Access	23.0
Other Indices	—
Hardship	92.9
Other Decision Support	—
2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	82.0

Healthy Places Index Score for Project Location (b)	11.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Construction: Construction Phases	Land use data are based applicant-provided buildout assumptions. Phase 1 (2025-2029) represents 50% of 10-year buildout.
Construction: Off-Road Equipment	Tier 4 Final construction equipment assumed as part of the Lithium Valley Specific Plan.
Construction: Trips and VMT	Trips increased based on scaler per buildout methodology.
Construction: On-Road Fugitive Dust	All roads used by future developments projects within the Specific Plan Area would be required to be paved. Per ICAPCD guidance a value of 85% paved is assumed in the modeling to account for the high levels of entrained dust generated from vehicle travel on paved roadways in the region. PM reductions altered based on dust control plan implementation strategies (watering unpaved roads three times per day).
Construction: Paving	Paved area acreages calculated based on buildout estimates. Conservatively assumed 100% asphalt.
Construction: Architectural Coatings	Assumed 6% of total area for striping.
Construction: Dust From Material Movement	Estimated material movement for Phase 2 roadways and infrastructure construction.

Lithium Valley SP Construction - Roadways + Infrastructure - Phase 3 (2045-2054) Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Lithium Valley SP Construction - Roadways + Infrastructure - Phase 3 (2045-2054)
Construction Start Date	1/1/2041
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	4.80
Location	33.18829759139308, -115.6026869228474
County	Imperial
City	Unincorporated
Air District	Imperial County APCD
Air Basin	Salton Sea
TAZ	5600
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Road Construction	4.89	Mile	61.7	0.00	0.00	—	—	—
Road Widening	7.19	Mile	62.3	0.00	0.00	—	—	—

Bridge/Overpass Construction	0.04	Mile	0.44	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	6.51	6.50	24.3	167	0.26	0.53	2,548	2,548	0.53	254	255	—	30,176	30,176	1.13	0.36	1.20	30,292
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	6.48	6.47	24.4	164	0.26	0.53	2,548	2,548	0.53	254	255	—	29,844	29,844	1.14	0.36	0.03	29,958
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.63	4.63	17.4	118	0.19	0.38	1,801	1,801	0.37	180	180	—	21,455	21,455	0.81	0.25	0.37	21,537
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.85	0.84	3.17	21.5	0.03	0.07	329	329	0.07	32.8	32.9	—	3,552	3,552	0.13	0.04	0.06	3,566

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2041	0.41	0.40	4.57	15.7	0.02	0.05	1,241	1,241	0.05	124	124	—	3,314	3,314	0.08	0.11	0.81	3,350
2042	3.15	3.08	24.3	167	0.26	0.53	2,548	2,548	0.53	254	255	—	30,176	30,176	1.13	0.29	1.20	30,292
2043	3.14	3.06	24.3	167	0.26	0.53	2,548	2,548	0.52	254	255	—	30,160	30,160	1.13	0.29	1.01	30,276
2044	3.13	3.05	24.3	166	0.26	0.53	2,548	2,548	0.52	254	255	—	30,148	30,148	1.13	0.29	0.86	30,264
2045	3.12	3.04	24.3	166	0.26	0.53	2,548	2,548	0.52	254	255	—	30,137	30,137	1.13	0.29	0.73	30,253
2046	3.12	3.04	24.3	166	0.26	0.53	2,548	2,548	0.52	254	255	—	30,129	30,129	1.13	0.29	0.62	30,244
2047	2.36	2.30	19.3	122	0.20	0.40	2,028	2,029	0.39	203	203	—	22,341	22,341	0.83	0.23	0.44	22,431
2048	2.30	2.30	19.3	122	0.20	0.40	2,028	2,029	0.39	203	203	—	22,336	22,336	0.83	0.23	0.38	22,426
2049	6.51	6.50	19.3	122	0.20	0.40	2,034	2,034	0.39	203	203	—	22,334	22,334	0.83	0.36	0.53	22,423
2050	6.50	6.49	8.27	37.6	0.06	0.14	2,034	2,034	0.14	203	203	—	7,989	7,989	0.20	0.35	0.46	8,098
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2041	0.39	0.35	4.67	14.3	0.02	0.05	1,241	1,241	0.05	124	124	—	3,168	3,168	0.08	0.11	0.02	3,203
2042	3.12	3.03	24.4	164	0.26	0.53	2,548	2,548	0.53	254	255	—	29,844	29,844	1.14	0.29	0.03	29,958
2043	3.11	3.02	24.3	164	0.26	0.53	2,548	2,548	0.52	254	255	—	29,830	29,830	1.14	0.29	0.03	29,944
2044	3.03	3.02	24.3	164	0.26	0.53	2,548	2,548	0.52	254	255	—	29,819	29,819	1.14	0.29	0.02	29,934
2045	3.02	3.01	24.3	163	0.26	0.53	2,548	2,548	0.52	254	255	—	29,809	29,809	1.14	0.29	0.02	29,924
2046	3.01	3.00	24.3	163	0.26	0.53	2,548	2,548	0.52	254	255	—	29,803	29,803	1.14	0.29	0.02	29,917
2047	2.27	2.27	19.3	120	0.20	0.40	2,028	2,029	0.39	203	203	—	22,085	22,085	0.84	0.23	0.01	22,175
2048	2.27	2.26	19.3	120	0.20	0.40	2,028	2,029	0.39	203	203	—	22,081	22,081	0.83	0.23	0.01	22,170
2049	6.48	6.47	19.3	120	0.20	0.40	2,034	2,034	0.39	203	203	—	22,079	22,079	0.83	0.36	0.01	22,168
2050	6.48	6.47	8.49	35.8	0.06	0.14	2,034	2,034	0.14	203	203	—	7,798	7,798	0.20	0.35	0.01	7,907
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2041	0.28	0.25	3.33	10.5	0.02	0.03	875	875	0.03	87.3	87.4	—	2,305	2,305	0.06	0.08	0.25	2,331
2042	2.23	2.17	17.3	117	0.18	0.37	1,793	1,794	0.37	179	179	—	21,362	21,362	0.81	0.21	0.37	21,444

2043	2.22	2.17	17.3	118	0.18	0.38	1,796	1,796	0.37	179	180	—	21,404	21,404	0.81	0.21	0.31	21,486
2044	2.22	2.17	17.4	118	0.19	0.38	1,801	1,801	0.37	180	180	—	21,455	21,455	0.81	0.21	0.27	21,537
2045	2.16	2.15	17.3	117	0.18	0.38	1,796	1,796	0.37	179	180	—	21,389	21,389	0.81	0.21	0.22	21,471
2046	1.90	1.89	15.6	102	0.16	0.33	1,613	1,614	0.33	161	161	—	18,627	18,627	0.70	0.19	0.18	18,700
2047	1.63	1.63	13.8	86.2	0.14	0.28	1,430	1,430	0.28	143	143	—	15,850	15,850	0.59	0.16	0.14	15,914
2048	1.63	1.62	13.8	86.5	0.14	0.28	1,434	1,434	0.28	143	143	—	15,890	15,890	0.60	0.16	0.12	15,954
2049	3.13	3.13	9.89	56.1	0.09	0.19	1,432	1,432	0.19	143	143	—	10,723	10,723	0.37	0.21	0.13	10,796
2050	4.63	4.63	6.03	26.0	0.04	0.10	1,434	1,434	0.10	143	143	—	5,626	5,626	0.14	0.25	0.14	5,704
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2041	0.05	0.05	0.61	1.92	< 0.005	0.01	160	160	0.01	15.9	15.9	—	382	382	0.01	0.01	0.04	386
2042	0.41	0.40	3.16	21.4	0.03	0.07	327	327	0.07	32.7	32.8	—	3,537	3,537	0.13	0.03	0.06	3,550
2043	0.41	0.40	3.17	21.5	0.03	0.07	328	328	0.07	32.7	32.8	—	3,544	3,544	0.13	0.03	0.05	3,557
2044	0.41	0.40	3.17	21.5	0.03	0.07	329	329	0.07	32.8	32.9	—	3,552	3,552	0.13	0.03	0.04	3,566
2045	0.39	0.39	3.17	21.4	0.03	0.07	328	328	0.07	32.7	32.8	—	3,541	3,541	0.13	0.03	0.04	3,555
2046	0.35	0.34	2.84	18.6	0.03	0.06	294	294	0.06	29.4	29.5	—	3,084	3,084	0.12	0.03	0.03	3,096
2047	0.30	0.30	2.51	15.7	0.03	0.05	261	261	0.05	26.1	26.1	—	2,624	2,624	0.10	0.03	0.02	2,635
2048	0.30	0.30	2.52	15.8	0.03	0.05	262	262	0.05	26.1	26.2	—	2,631	2,631	0.10	0.03	0.02	2,641
2049	0.57	0.57	1.80	10.2	0.02	0.03	261	261	0.03	26.1	26.1	—	1,775	1,775	0.06	0.04	0.02	1,787
2050	0.85	0.84	1.10	4.75	0.01	0.02	262	262	0.02	26.1	26.2	—	931	931	0.02	0.04	0.02	944

3. Construction Emissions Details

3.1. Linear, Grubbing & Land Clearing (2041) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.21	0.21	3.83	12.3	0.02	0.03	—	0.03	0.03	—	0.03	—	1,757	1,757	0.07	0.01	—	1,763
Dust From Material Movement	—	—	—	—	—	—	0.41	0.41	—	0.04	0.04	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.21	0.21	3.83	12.3	0.02	0.03	—	0.03	0.03	—	0.03	—	1,757	1,757	0.07	0.01	—	1,763
Dust From Material Movement	—	—	—	—	—	—	0.41	0.41	—	0.04	0.04	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.15	2.74	8.76	0.01	0.02	—	0.02	0.02	—	0.02	—	1,255	1,255	0.05	0.01	—	1,259
Dust From Material Movement	—	—	—	—	—	—	0.30	0.30	—	0.03	0.03	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.50	1.60	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	208	208	0.01	< 0.005	—	208

Dust From Material Movement	—	—	—	—	—	—	0.05	0.05	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.18	0.17	0.10	3.20	0.00	0.00	1,062	1,062	0.00	106	106	—	972	972	0.01	0.01	0.58	975
Vendor	0.01	0.01	0.18	0.07	< 0.005	< 0.005	60.1	60.1	< 0.005	6.00	6.01	—	171	171	< 0.005	0.02	0.02	179
Hauling	0.02	0.01	0.47	0.12	< 0.005	0.01	118	118	0.01	11.8	11.8	—	413	413	< 0.005	0.07	0.21	433
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.16	0.12	0.13	1.78	0.00	0.00	1,062	1,062	0.00	106	106	—	825	825	0.01	0.01	0.02	827
Vendor	0.01	0.01	0.19	0.08	< 0.005	< 0.005	60.1	60.1	< 0.005	6.00	6.01	—	172	172	< 0.005	0.02	< 0.005	179
Hauling	0.02	0.01	0.52	0.13	< 0.005	0.01	118	118	0.01	11.8	11.8	—	413	413	< 0.005	0.07	0.01	433
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.09	0.09	1.62	0.00	0.00	749	749	0.00	74.8	74.8	—	633	633	< 0.005	< 0.005	0.18	634
Vendor	0.01	< 0.005	0.13	0.05	< 0.005	< 0.005	42.4	42.4	< 0.005	4.23	4.23	—	122	122	< 0.005	0.02	0.01	128
Hauling	0.01	0.01	0.36	0.09	< 0.005	0.01	83.1	83.1	0.01	8.30	8.31	—	295	295	< 0.005	0.05	0.06	309
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.30	0.00	0.00	137	137	0.00	13.6	13.6	—	105	105	< 0.005	< 0.005	0.03	105
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	7.73	7.73	< 0.005	0.77	0.77	—	20.3	20.3	< 0.005	< 0.005	< 0.005	21.2
Hauling	< 0.005	< 0.005	0.07	0.02	< 0.005	< 0.005	15.2	15.2	< 0.005	1.52	1.52	—	48.8	48.8	< 0.005	0.01	0.01	51.2

3.3. Linear, Grubbing & Land Clearing (2042) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.21	0.21	3.83	12.3	0.02	0.03	—	0.03	0.03	—	0.03	—	1,757	1,757	0.07	0.01	—	1,763
Dust From Material Movement	—	—	—	—	—	—	0.41	0.41	—	0.04	0.04	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.44	3.44	< 0.005	< 0.005	—	3.45
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.57	0.57	< 0.005	< 0.005	—	0.57

Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.15	0.12	0.13	1.73	0.00	0.00	1,062	1,062	0.00	106	106	—	821	821	0.01	0.01	0.01	822
Vendor	0.01	0.01	0.19	0.08	< 0.005	< 0.005	60.1	60.1	< 0.005	6.00	6.01	—	169	169	< 0.005	0.02	< 0.005	177
Hauling	0.02	0.01	0.52	0.13	< 0.005	0.01	118	118	0.01	11.8	11.8	—	411	411	< 0.005	0.07	< 0.005	431
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	2.05	2.05	0.00	0.20	0.20	—	1.72	1.72	< 0.005	< 0.005	< 0.005	1.73
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.12	0.12	< 0.005	0.01	0.01	—	0.33	0.33	< 0.005	< 0.005	< 0.005	0.35
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.23	0.23	< 0.005	0.02	0.02	—	0.80	0.80	< 0.005	< 0.005	< 0.005	0.84
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	0.37	0.37	0.00	0.04	0.04	—	0.29	0.29	< 0.005	< 0.005	< 0.005	0.29
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	—	0.05	0.05	< 0.005	< 0.005	< 0.005	0.06
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.04	0.04	< 0.005	< 0.005	< 0.005	—	0.13	0.13	< 0.005	< 0.005	< 0.005	0.14

3.5. Linear, Grading & Excavation (2042) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.75	2.75	23.7	160	0.26	0.52	—	0.52	0.52	—	0.52	—	27,611	27,611	1.12	0.22	—	27,706
Dust From Material Movement	—	—	—	—	—	—	3.45	3.45	—	0.37	0.37	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.75	2.75	23.7	160	0.26	0.52	—	0.52	0.52	—	0.52	—	27,611	27,611	1.12	0.22	—	27,706
Dust From Material Movement	—	—	—	—	—	—	3.45	3.45	—	0.37	0.37	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.96	1.96	16.9	114	0.18	0.37	—	0.37	0.37	—	0.37	—	19,668	19,668	0.80	0.16	—	19,736
Dust From Material Movement	—	—	—	—	—	—	2.46	2.46	—	0.27	0.27	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.36	0.36	3.08	20.7	0.03	0.07	—	0.07	0.07	—	0.07	—	3,256	3,256	0.13	0.03	—	3,268
Dust From Material Movement	—	—	—	—	—	—	0.45	0.45	—	0.05	0.05	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.39	0.31	0.22	7.07	0.00	0.00	2,425	2,425	0.00	242	242	—	2,206	2,206	0.01	0.01	1.13	2,211
Vendor	0.01	0.01	0.26	0.11	< 0.005	0.01	90.1	90.1	0.01	9.01	9.01	—	254	254	< 0.005	0.04	0.02	265
Hauling	< 0.005	< 0.005	0.12	0.03	< 0.005	< 0.005	29.5	29.5	< 0.005	2.94	2.95	—	103	103	< 0.005	0.02	0.05	108
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.35	0.27	0.29	3.95	0.00	0.00	2,425	2,425	0.00	242	242	—	1,873	1,873	0.02	0.01	0.03	1,877
Vendor	0.01	0.01	0.29	0.12	< 0.005	0.01	90.1	90.1	0.01	9.01	9.01	—	254	254	< 0.005	0.04	< 0.005	265
Hauling	< 0.005	< 0.005	0.13	0.03	< 0.005	< 0.005	29.5	29.5	< 0.005	2.94	2.95	—	103	103	< 0.005	0.02	< 0.005	108
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.25	0.20	0.15	3.57	0.00	0.00	1,704	1,704	0.00	170	170	—	1,432	1,432	0.01	0.01	0.35	1,435
Vendor	0.01	0.01	0.20	0.08	< 0.005	< 0.005	63.4	63.4	< 0.005	6.33	6.34	—	181	181	< 0.005	0.03	0.01	189
Hauling	< 0.005	< 0.005	0.09	0.02	< 0.005	< 0.005	20.7	20.7	< 0.005	2.07	2.07	—	73.2	73.2	< 0.005	0.01	0.01	76.7
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.03	0.65	0.00	0.00	311	311	0.00	31.1	31.1	—	237	237	< 0.005	< 0.005	0.06	238
Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	29.9	29.9	< 0.005	< 0.005	< 0.005	31.2
Hauling	< 0.005	< 0.005	0.02	< 0.005	< 0.005	< 0.005	3.78	3.78	< 0.005	0.38	0.38	—	12.1	12.1	< 0.005	< 0.005	< 0.005	12.7

3.7. Linear, Grading & Excavation (2043) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.75	2.75	23.7	160	0.26	0.52	—	0.52	0.52	—	0.52	—	27,611	27,611	1.12	0.22	—	27,706
Dust From Material Movement	—	—	—	—	—	—	3.45	3.45	—	0.37	0.37	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.75	2.75	23.7	160	0.26	0.52	—	0.52	0.52	—	0.52	—	27,611	27,611	1.12	0.22	—	27,706
Dust From Material Movement	—	—	—	—	—	—	3.45	3.45	—	0.37	0.37	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.97	1.97	16.9	114	0.18	0.37	—	0.37	0.37	—	0.37	—	19,722	19,722	0.80	0.16	—	19,790

Dust From Material Movement	—	—	—	—	—	—	2.46	2.46	—	0.27	0.27	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.36	0.36	3.09	20.8	0.03	0.07	—	0.07	0.07	—	0.07	—	3,265	3,265	0.13	0.03	—	3,276
Dust From Material Movement	—	—	—	—	—	—	0.45	0.45	—	0.05	0.05	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.37	0.30	0.22	6.91	0.00	0.00	2,425	2,425	0.00	242	242	—	2,195	2,195	0.01	0.01	0.96	2,200
Vendor	0.01	0.01	0.26	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	251	251	< 0.005	0.04	0.02	262
Hauling	< 0.005	< 0.005	0.12	0.03	< 0.005	< 0.005	29.5	29.5	< 0.005	2.94	2.95	—	102	102	< 0.005	0.02	0.04	107
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.34	0.26	0.22	3.86	0.00	0.00	2,425	2,425	0.00	242	242	—	1,864	1,864	0.02	0.01	0.02	1,867
Vendor	0.01	0.01	0.28	0.12	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	251	251	< 0.005	0.04	< 0.005	262
Hauling	< 0.005	< 0.005	0.13	0.03	< 0.005	< 0.005	29.5	29.5	< 0.005	2.94	2.95	—	103	103	< 0.005	0.02	< 0.005	107
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.25	0.19	0.15	3.51	0.00	0.00	1,709	1,709	0.00	171	171	—	1,428	1,428	0.01	0.01	0.30	1,431
Vendor	0.01	0.01	0.20	0.08	< 0.005	< 0.005	63.5	63.5	< 0.005	6.35	6.35	—	179	179	< 0.005	0.03	< 0.005	187

Hauling	< 0.005	< 0.005	0.09	0.02	< 0.005	< 0.005	20.8	20.8	< 0.005	2.08	2.08	—	73.2	73.2	< 0.005	0.01	0.01	76.7
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.03	0.64	0.00	0.00	312	312	0.00	31.1	31.1	—	236	236	< 0.005	< 0.005	0.05	237
Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	29.7	29.7	< 0.005	< 0.005	< 0.005	31.0
Hauling	< 0.005	< 0.005	0.02	< 0.005	< 0.005	< 0.005	3.79	3.79	< 0.005	0.38	0.38	—	12.1	12.1	< 0.005	< 0.005	< 0.005	12.7

3.9. Linear, Grading & Excavation (2044) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.75	2.75	23.7	160	0.26	0.52	—	0.52	0.52	—	0.52	—	27,611	27,611	1.12	0.22	—	27,706
Dust From Material Movement	—	—	—	—	—	—	3.45	3.45	—	0.37	0.37	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.75	2.75	23.7	160	0.26	0.52	—	0.52	0.52	—	0.52	—	27,611	27,611	1.12	0.22	—	27,706
Dust From Material Movement	—	—	—	—	—	—	3.45	3.45	—	0.37	0.37	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.97	1.97	17.0	114	0.18	0.37	—	0.37	0.37	—	0.37	—	19,776	19,776	0.80	0.16	—	19,844
Dust From Material Movement	—	—	—	—	—	—	2.47	2.47	—	0.27	0.27	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.36	0.36	3.09	20.9	0.03	0.07	—	0.07	0.07	—	0.07	—	3,274	3,274	0.13	0.03	—	3,285
Dust From Material Movement	—	—	—	—	—	—	0.45	0.45	—	0.05	0.05	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.36	0.29	0.22	6.75	0.00	0.00	2,425	2,425	0.00	242	242	—	2,185	2,185	0.01	0.01	0.82	2,190
Vendor	0.01	0.01	0.26	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	248	248	< 0.005	0.04	0.01	259
Hauling	< 0.005	< 0.005	0.12	0.03	< 0.005	< 0.005	29.5	29.5	< 0.005	2.94	2.95	—	102	102	< 0.005	0.02	0.03	107
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.26	0.26	0.22	3.77	0.00	0.00	2,425	2,425	0.00	242	242	—	1,856	1,856	0.02	0.01	0.02	1,860

Vendor	0.01	0.01	0.28	0.12	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	248	248	< 0.005	0.04	< 0.005	260
Hauling	< 0.005	< 0.005	0.13	0.03	< 0.005	< 0.005	29.5	29.5	< 0.005	2.94	2.95	—	102	102	< 0.005	0.02	< 0.005	107
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.24	0.19	0.15	3.46	0.00	0.00	1,714	1,714	0.00	171	171	—	1,426	1,426	0.01	0.01	0.25	1,429
Vendor	0.01	0.01	0.20	0.08	< 0.005	< 0.005	63.7	63.7	< 0.005	6.37	6.37	—	178	178	< 0.005	0.03	< 0.005	186
Hauling	< 0.005	< 0.005	0.09	0.02	< 0.005	< 0.005	20.8	20.8	< 0.005	2.08	2.08	—	73.2	73.2	< 0.005	0.01	0.01	76.7
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.03	0.63	0.00	0.00	313	313	0.00	31.2	31.2	—	236	236	< 0.005	< 0.005	0.04	237
Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	29.4	29.4	< 0.005	< 0.005	< 0.005	30.8
Hauling	< 0.005	< 0.005	0.02	< 0.005	< 0.005	< 0.005	3.80	3.80	< 0.005	0.38	0.38	—	12.1	12.1	< 0.005	< 0.005	< 0.005	12.7

3.11. Linear, Grading & Excavation (2045) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.75	2.75	23.7	160	0.26	0.52	—	0.52	0.52	—	0.52	—	27,611	27,611	1.12	0.22	—	27,706
Dust From Material Movement	—	—	—	—	—	—	3.45	3.45	—	0.37	0.37	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	2.75	2.75	23.7	160	0.26	0.52	—	0.52	0.52	—	0.52	—	27,611	27,611	1.12	0.22	—	27,706
Dust From Material Movement	—	—	—	—	—	—	3.45	3.45	—	0.37	0.37	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	1.97	1.97	16.9	114	0.18	0.37	—	0.37	0.37	—	0.37	—	19,722	19,722	0.80	0.16	—	19,790
Dust From Material Movement	—	—	—	—	—	—	2.46	2.46	—	0.27	0.27	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.36	0.36	3.09	20.8	0.03	0.07	—	0.07	0.07	—	0.07	—	3,265	3,265	0.13	0.03	—	3,276
Dust From Material Movement	—	—	—	—	—	—	0.45	0.45	—	0.05	0.05	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.35	0.27	0.22	6.67	0.00	0.00	2,425	2,425	0.00	242	242	—	2,177	2,177	0.01	0.01	0.69	2,181
Vendor	0.01	0.01	0.26	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	246	246	< 0.005	0.04	0.01	257

Hauling	< 0.005	< 0.005	0.12	0.03	< 0.005	< 0.005	29.5	29.5	< 0.005	2.94	2.95	—	102	102	< 0.005	0.02	0.03	107
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.25	0.24	0.22	3.69	0.00	0.00	2,425	2,425	0.00	242	242	—	1,849	1,849	0.02	0.01	0.02	1,852
Vendor	0.01	0.01	0.28	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	246	246	< 0.005	0.04	< 0.005	257
Hauling	< 0.005	< 0.005	0.13	0.03	< 0.005	< 0.005	29.5	29.5	< 0.005	2.94	2.95	—	102	102	< 0.005	0.02	< 0.005	107
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.18	0.18	0.15	3.39	0.00	0.00	1,709	1,709	0.00	171	171	—	1,417	1,417	0.01	0.01	0.21	1,420
Vendor	0.01	0.01	0.20	0.08	< 0.005	< 0.005	63.5	63.5	< 0.005	6.35	6.35	—	176	176	< 0.005	0.03	< 0.005	184
Hauling	< 0.005	< 0.005	0.09	0.02	< 0.005	< 0.005	20.8	20.8	< 0.005	2.08	2.08	—	72.8	72.8	< 0.005	0.01	0.01	76.4
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.62	0.00	0.00	312	312	0.00	31.1	31.1	—	235	235	< 0.005	< 0.005	0.04	235
Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	11.6	11.6	< 0.005	1.16	1.16	—	29.1	29.1	< 0.005	< 0.005	< 0.005	30.4
Hauling	< 0.005	< 0.005	0.02	< 0.005	< 0.005	< 0.005	3.79	3.79	< 0.005	0.38	0.38	—	12.1	12.1	< 0.005	< 0.005	< 0.005	12.6

3.13. Linear, Grading & Excavation (2046) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.75	2.75	23.7	160	0.26	0.52	—	0.52	0.52	—	0.52	—	27,611	27,611	1.12	0.22	—	27,706
Dust From Material Movement	—	—	—	—	—	—	3.45	3.45	—	0.37	0.37	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.75	2.75	23.7	160	0.26	0.52	—	0.52	0.52	—	0.52	—	27,611	27,611	1.12	0.22	—	27,706
Dust From Material Movement	—	—	—	—	—	—	3.45	3.45	—	0.37	0.37	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.99	0.99	8.48	57.2	0.09	0.19	—	0.19	0.19	—	0.19	—	9,888	9,888	0.40	0.08	—	9,922
Dust From Material Movement	—	—	—	—	—	—	1.23	1.23	—	0.13	0.13	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.18	0.18	1.55	10.4	0.02	0.03	—	0.03	0.03	—	0.03	—	1,637	1,637	0.07	0.01	—	1,643
Dust From Material Movement	—	—	—	—	—	—	0.23	0.23	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.35	0.27	0.21	6.66	0.00	0.00	2,425	2,425	0.00	242	242	—	2,170	2,170	0.01	0.01	0.59	2,174
Vendor	0.01	0.01	0.25	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	244	244	< 0.005	0.04	0.01	255
Hauling	< 0.005	< 0.005	0.12	0.03	< 0.005	< 0.005	29.5	29.5	< 0.005	2.94	2.95	—	102	102	< 0.005	0.02	0.03	107
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.24	0.24	0.21	3.68	0.00	0.00	2,425	2,425	0.00	242	242	—	1,843	1,843	0.02	0.01	0.02	1,847
Vendor	0.01	0.01	0.28	0.11	< 0.005	0.01	90.1	90.1	< 0.005	9.01	9.01	—	244	244	< 0.005	0.04	< 0.005	255
Hauling	< 0.005	< 0.005	0.13	0.03	< 0.005	< 0.005	29.5	29.5	< 0.005	2.94	2.95	—	102	102	< 0.005	0.02	< 0.005	107
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.09	0.07	1.67	0.00	0.00	857	857	0.00	85.6	85.6	—	708	708	< 0.005	< 0.005	0.09	709
Vendor	< 0.005	< 0.005	0.10	0.04	< 0.005	< 0.005	31.9	31.9	< 0.005	3.18	3.18	—	87.4	87.4	< 0.005	0.01	< 0.005	91.4
Hauling	< 0.005	< 0.005	0.05	0.01	< 0.005	< 0.005	10.4	10.4	< 0.005	1.04	1.04	—	36.5	36.5	< 0.005	0.01	< 0.005	38.2
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.31	0.00	0.00	156	156	0.00	15.6	15.6	—	117	117	< 0.005	< 0.005	0.02	117
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	5.81	5.81	< 0.005	0.58	0.58	—	14.5	14.5	< 0.005	< 0.005	< 0.005	15.1
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	1.90	1.90	< 0.005	0.19	0.19	—	6.04	6.04	< 0.005	< 0.005	< 0.005	6.33

3.15. Linear, Drainage, Utilities, & Sub-Grade (2046) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	2.07	2.07	18.7	117	0.19	0.39	—	0.39	0.39	—	0.39	—	20,274	20,274	0.82	0.16	—	20,343
Dust From Material Movement	—	—	—	—	—	—	2.48	2.48	—	0.27	0.27	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.07	2.07	18.7	117	0.19	0.39	—	0.39	0.39	—	0.39	—	20,274	20,274	0.82	0.16	—	20,343
Dust From Material Movement	—	—	—	—	—	—	2.48	2.48	—	0.27	0.27	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.74	0.74	6.66	41.6	0.07	0.14	—	0.14	0.14	—	0.14	—	7,221	7,221	0.29	0.06	—	7,246
Dust From Material Movement	—	—	—	—	—	—	0.88	0.88	—	0.10	0.10	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.13	1.21	7.60	0.01	0.03	—	0.03	0.03	—	0.03	—	1,195	1,195	0.05	0.01	—	1,200

Dust From Material Movement	—	—	—	—	—	—	0.16	0.16	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.27	0.21	0.17	5.24	0.00	0.00	1,907	1,907	0.00	190	190	—	1,707	1,707	0.01	0.01	0.46	1,710
Vendor	0.01	0.01	0.17	0.07	< 0.005	< 0.005	60.1	60.1	< 0.005	6.00	6.01	—	163	163	< 0.005	0.02	< 0.005	170
Hauling	0.01	0.01	0.23	0.06	< 0.005	0.01	58.9	58.9	0.01	5.89	5.89	—	204	204	< 0.005	0.03	0.05	213
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.19	0.19	0.17	2.89	0.00	0.00	1,907	1,907	0.00	190	190	—	1,449	1,449	0.01	0.01	0.01	1,452
Vendor	0.01	0.01	0.19	0.07	< 0.005	< 0.005	60.1	60.1	< 0.005	6.00	6.01	—	163	163	< 0.005	0.02	< 0.005	170
Hauling	0.01	0.01	0.26	0.06	< 0.005	0.01	58.9	58.9	0.01	5.89	5.89	—	204	204	< 0.005	0.03	< 0.005	214
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.06	1.31	0.00	0.00	670	670	0.00	66.9	66.9	—	554	554	< 0.005	< 0.005	0.07	555
Vendor	< 0.005	< 0.005	0.06	0.03	< 0.005	< 0.005	21.1	21.1	< 0.005	2.11	2.11	—	57.9	57.9	< 0.005	0.01	< 0.005	60.6
Hauling	< 0.005	< 0.005	0.09	0.02	< 0.005	< 0.005	20.7	20.7	< 0.005	2.07	2.07	—	72.5	72.5	< 0.005	0.01	0.01	76.0
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.24	0.00	0.00	122	122	0.00	12.2	12.2	—	91.7	91.7	< 0.005	< 0.005	0.01	91.9
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	3.85	3.85	< 0.005	0.39	0.39	—	9.59	9.59	< 0.005	< 0.005	< 0.005	10.0
Hauling	< 0.005	< 0.005	0.02	< 0.005	< 0.005	< 0.005	3.78	3.78	< 0.005	0.38	0.38	—	12.0	12.0	< 0.005	< 0.005	< 0.005	12.6

3.17. Linear, Drainage, Utilities, & Sub-Grade (2047) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.07	2.07	18.7	117	0.19	0.39	—	0.39	0.39	—	0.39	—	20,274	20,274	0.82	0.16	—	20,343
Dust From Material Movement	—	—	—	—	—	—	2.48	2.48	—	0.27	0.27	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.07	2.07	18.7	117	0.19	0.39	—	0.39	0.39	—	0.39	—	20,274	20,274	0.82	0.16	—	20,343
Dust From Material Movement	—	—	—	—	—	—	2.48	2.48	—	0.27	0.27	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.48	1.48	13.3	83.5	0.14	0.28	—	0.28	0.28	—	0.28	—	14,481	14,481	0.59	0.12	—	14,531
Dust From Material Movement	—	—	—	—	—	—	1.77	1.77	—	0.19	0.19	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.27	0.27	2.44	15.2	0.03	0.05	—	0.05	0.05	—	0.05	—	2,398	2,398	0.10	0.02	—	2,406
Dust From Material Movement	—	—	—	—	—	—	0.32	0.32	—	0.03	0.03	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.27	0.21	0.17	5.18	0.00	0.00	1,907	1,907	0.00	190	190	—	1,702	1,702	0.01	0.01	0.39	1,705
Vendor	0.01	0.01	0.17	0.07	< 0.005	< 0.005	60.1	60.1	< 0.005	6.00	6.01	—	161	161	< 0.005	0.02	< 0.005	168
Hauling	0.01	0.01	0.23	0.06	< 0.005	0.01	58.9	58.9	0.01	5.89	5.89	—	203	203	< 0.005	0.03	0.04	213
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.19	0.19	0.17	2.89	0.00	0.00	1,907	1,907	0.00	190	190	—	1,445	1,445	0.01	0.01	0.01	1,448
Vendor	0.01	0.01	0.19	0.07	< 0.005	< 0.005	60.1	60.1	< 0.005	6.00	6.01	—	162	162	< 0.005	0.02	< 0.005	169
Hauling	0.01	0.01	0.26	0.06	< 0.005	0.01	58.9	58.9	0.01	5.89	5.89	—	204	204	< 0.005	0.03	< 0.005	213
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.14	0.14	0.12	2.62	0.00	0.00	1,344	1,344	0.00	134	134	—	1,108	1,108	0.01	0.01	0.12	1,110
Vendor	0.01	< 0.005	0.13	0.05	< 0.005	< 0.005	42.4	42.4	< 0.005	4.23	4.23	—	115	115	< 0.005	0.02	< 0.005	120
Hauling	< 0.005	< 0.005	0.18	0.05	< 0.005	< 0.005	41.5	41.5	< 0.005	4.15	4.15	—	145	145	< 0.005	0.02	0.01	152
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.02	0.48	0.00	0.00	245	245	0.00	24.5	24.5	—	183	183	< 0.005	< 0.005	0.02	184

Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	7.73	7.73	< 0.005	0.77	0.77	—	19.1	19.1	< 0.005	< 0.005	< 0.005	19.9
Hauling	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	7.58	7.58	< 0.005	0.76	0.76	—	24.1	24.1	< 0.005	< 0.005	< 0.005	25.2

3.19. Linear, Drainage, Utilities, & Sub-Grade (2048) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.07	2.07	18.7	117	0.19	0.39	—	0.39	0.39	—	0.39	—	20,274	20,274	0.82	0.16	—	20,343
Dust From Material Movement	—	—	—	—	—	—	2.48	2.48	—	0.27	0.27	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.07	2.07	18.7	117	0.19	0.39	—	0.39	0.39	—	0.39	—	20,274	20,274	0.82	0.16	—	20,343
Dust From Material Movement	—	—	—	—	—	—	2.48	2.48	—	0.27	0.27	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	1.48	1.48	13.4	83.8	0.14	0.28	—	0.28	0.28	—	0.28	—	14,521	14,521	0.59	0.12	—	14,571
Dust From Material Movement	—	—	—	—	—	—	1.78	1.78	—	0.19	0.19	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.27	0.27	2.44	15.3	0.03	0.05	—	0.05	0.05	—	0.05	—	2,404	2,404	0.10	0.02	—	2,412
Dust From Material Movement	—	—	—	—	—	—	0.32	0.32	—	0.04	0.04	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.21	0.21	0.17	5.17	0.00	0.00	1,907	1,907	0.00	190	190	—	1,698	1,698	0.01	0.01	0.34	1,701
Vendor	0.01	0.01	0.17	0.07	< 0.005	< 0.005	60.1	60.1	< 0.005	6.00	6.01	—	161	161	< 0.005	0.02	< 0.005	167
Hauling	0.01	0.01	0.23	0.06	< 0.005	0.01	58.9	58.9	0.01	5.89	5.89	—	203	203	< 0.005	0.03	0.04	213
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.19	0.18	0.17	2.82	0.00	0.00	1,907	1,907	0.00	190	190	—	1,442	1,442	0.01	0.01	0.01	1,445
Vendor	0.01	0.01	0.18	0.07	< 0.005	< 0.005	60.1	60.1	< 0.005	6.00	6.01	—	161	161	< 0.005	0.02	< 0.005	168
Hauling	0.01	0.01	0.26	0.06	< 0.005	0.01	58.9	58.9	0.01	5.89	5.89	—	203	203	< 0.005	0.03	< 0.005	213
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.13	0.13	0.12	2.62	0.00	0.00	1,348	1,348	0.00	135	135	—	1,108	1,108	0.01	0.01	0.10	1,110

Vendor	0.01	< 0.005	0.13	0.05	< 0.005	< 0.005	42.5	42.5	< 0.005	4.24	4.25	—	115	115	< 0.005	0.02	< 0.005	120
Hauling	< 0.005	< 0.005	0.18	0.04	< 0.005	< 0.005	41.6	41.6	< 0.005	4.16	4.17	—	146	146	< 0.005	0.02	0.01	153
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.48	0.00	0.00	246	246	0.00	24.6	24.6	—	183	183	< 0.005	< 0.005	0.02	184
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	7.75	7.75	< 0.005	0.77	0.77	—	19.0	19.0	< 0.005	< 0.005	< 0.005	19.9
Hauling	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	7.60	7.60	< 0.005	0.76	0.76	—	24.1	24.1	< 0.005	< 0.005	< 0.005	25.3

3.21. Linear, Drainage, Utilities, & Sub-Grade (2049) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.07	2.07	18.7	117	0.19	0.39	—	0.39	0.39	—	0.39	—	20,274	20,274	0.82	0.16	—	20,343
Dust From Material Movement	—	—	—	—	—	—	2.48	2.48	—	0.27	0.27	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.07	2.07	18.7	117	0.19	0.39	—	0.39	0.39	—	0.39	—	20,274	20,274	0.82	0.16	—	20,343

Dust From Material Movement	—	—	—	—	—	—	2.48	2.48	—	0.27	0.27	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.74	0.74	6.66	41.6	0.07	0.14	—	0.14	0.14	—	0.14	—	7,221	7,221	0.29	0.06	—	7,246
Dust From Material Movement	—	—	—	—	—	—	0.88	0.88	—	0.10	0.10	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.13	1.21	7.60	0.01	0.03	—	0.03	0.03	—	0.03	—	1,195	1,195	0.05	0.01	—	1,200
Dust From Material Movement	—	—	—	—	—	—	0.16	0.16	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.21	0.20	0.17	5.11	0.00	0.00	1,907	1,907	0.00	190	190	—	1,695	1,695	0.01	0.01	0.29	1,698
Vendor	0.01	0.01	0.17	0.07	< 0.005	< 0.005	60.1	60.1	< 0.005	6.00	6.01	—	160	160	< 0.005	0.02	< 0.005	167
Hauling	0.01	0.01	0.23	0.06	< 0.005	0.01	58.9	58.9	0.01	5.89	5.89	—	203	203	< 0.005	0.03	0.03	213

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.18	0.18	0.17	2.82	0.00	0.00	1,907	1,907	0.00	190	190	—	1,439	1,439	0.01	0.01	0.01	1,442
Vendor	0.01	0.01	0.18	0.07	< 0.005	< 0.005	60.1	60.1	< 0.005	6.00	6.01	—	160	160	< 0.005	0.02	< 0.005	167
Hauling	0.01	0.01	0.25	0.06	< 0.005	0.01	58.9	58.9	0.01	5.89	5.89	—	203	203	< 0.005	0.03	< 0.005	213
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.06	1.30	0.00	0.00	670	670	0.00	66.9	66.9	—	550	550	< 0.005	< 0.005	0.04	551
Vendor	< 0.005	< 0.005	0.06	0.03	< 0.005	< 0.005	21.1	21.1	< 0.005	2.11	2.11	—	56.9	56.9	< 0.005	0.01	< 0.005	59.4
Hauling	< 0.005	< 0.005	0.09	0.02	< 0.005	< 0.005	20.7	20.7	< 0.005	2.07	2.07	—	72.3	72.3	< 0.005	0.01	0.01	75.8
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.24	0.00	0.00	122	122	0.00	12.2	12.2	—	91.1	91.1	< 0.005	< 0.005	0.01	91.3
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	3.85	3.85	< 0.005	0.39	0.39	—	9.42	9.42	< 0.005	< 0.005	< 0.005	9.83
Hauling	< 0.005	< 0.005	0.02	< 0.005	< 0.005	< 0.005	3.78	3.78	< 0.005	0.38	0.38	—	12.0	12.0	< 0.005	< 0.005	< 0.005	12.6

3.23. Linear, Paving (2049) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	0.50	5.89	33.1	0.04	0.09	—	0.09	0.09	—	0.09	—	4,722	4,722	0.19	0.04	—	4,738
Architectural Coatings	5.79	5.79	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	0.50	5.89	33.1	0.04	0.09	—	0.09	0.09	—	0.09	—	4,722	4,722	0.19	0.04	—	4,738
Architectural Coatings	5.79	5.79	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.18	0.18	2.11	11.8	0.02	0.03	—	0.03	0.03	—	0.03	—	1,691	1,691	0.07	0.01	—	1,697
Architectural Coatings	2.07	2.07	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.38	2.16	< 0.005	0.01	—	0.01	0.01	—	0.01	—	280	280	0.01	< 0.005	—	281
Architectural Coatings	0.38	0.38	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.16	0.15	0.13	3.87	0.00	0.00	1,444	1,444	0.00	144	144	—	1,283	1,283	0.01	0.01	0.22	1,286
Vendor	0.01	0.01	0.17	0.07	< 0.005	< 0.005	60.1	60.1	< 0.005	6.00	6.01	—	160	160	< 0.005	0.02	< 0.005	167
Hauling	0.06	0.05	2.08	0.55	0.02	0.05	530	530	0.05	53.0	53.0	—	1,827	1,827	< 0.005	0.30	0.31	1,915
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.14	0.14	0.13	2.14	0.00	0.00	1,444	1,444	0.00	144	144	—	1,090	1,090	0.01	0.01	0.01	1,092
Vendor	0.01	0.01	0.18	0.07	< 0.005	< 0.005	60.1	60.1	< 0.005	6.00	6.01	—	160	160	< 0.005	0.02	< 0.005	167
Hauling	0.05	0.05	2.29	0.57	0.02	0.05	530	530	0.05	53.0	53.0	—	1,829	1,829	< 0.005	0.30	0.01	1,917
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.04	0.99	0.00	0.00	510	510	0.00	50.9	50.9	—	419	419	< 0.005	< 0.005	0.03	420
Vendor	< 0.005	< 0.005	0.06	0.03	< 0.005	< 0.005	21.2	21.2	< 0.005	2.12	2.12	—	57.2	57.2	< 0.005	0.01	< 0.005	59.7
Hauling	0.02	0.02	0.80	0.20	0.01	0.02	187	187	0.02	18.7	18.7	—	654	654	< 0.005	0.11	0.05	686
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.18	0.00	0.00	93.1	93.1	0.00	9.30	9.30	—	69.3	69.3	< 0.005	< 0.005	0.01	69.5
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	3.88	3.88	< 0.005	0.39	0.39	—	9.48	9.48	< 0.005	< 0.005	< 0.005	9.88
Hauling	< 0.005	< 0.005	0.15	0.04	< 0.005	< 0.005	34.2	34.2	< 0.005	3.42	3.42	—	108	108	< 0.005	0.02	0.01	114

3.25. Linear, Paving (2050) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.50	0.50	5.89	33.1	0.04	0.09	—	0.09	0.09	—	0.09	—	4,722	4,722	0.19	0.04	—	4,738
Architectural Coatings	5.79	5.79	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	0.50	5.89	33.1	0.04	0.09	—	0.09	0.09	—	0.09	—	4,722	4,722	0.19	0.04	—	4,738
Architectural Coatings	5.79	5.79	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.35	0.35	4.21	23.6	0.03	0.06	—	0.06	0.06	—	0.06	—	3,373	3,373	0.14	0.03	—	3,384
Architectural Coatings	4.13	4.13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	0.77	4.31	0.01	0.01	—	0.01	0.01	—	0.01	—	558	558	0.02	< 0.005	—	560

Architect Coatings	0.75	0.75	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.15	0.15	0.13	3.87	0.00	0.00	1,444	1,444	0.00	144	144	—	1,281	1,281	0.01	0.01	0.19	1,284
Vendor	0.01	0.01	0.17	0.07	< 0.005	< 0.005	60.1	60.1	< 0.005	6.00	6.01	—	159	159	< 0.005	0.02	< 0.005	166
Hauling	0.06	0.05	2.08	0.55	0.02	0.05	530	530	0.05	53.0	53.0	—	1,825	1,825	< 0.005	0.28	0.27	1,909
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.14	0.14	0.13	2.14	0.00	0.00	1,444	1,444	0.00	144	144	—	1,088	1,088	0.01	0.01	< 0.005	1,091
Vendor	0.01	0.01	0.18	0.07	< 0.005	< 0.005	60.1	60.1	< 0.005	6.00	6.01	—	159	159	< 0.005	0.02	< 0.005	166
Hauling	0.05	0.05	2.29	0.57	0.02	0.05	530	530	0.05	53.0	53.0	—	1,827	1,827	< 0.005	0.28	0.01	1,911
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.10	0.09	1.95	0.00	0.00	1,018	1,018	0.00	102	102	—	834	834	0.01	0.01	0.06	836
Vendor	0.01	< 0.005	0.13	0.05	< 0.005	< 0.005	42.4	42.4	< 0.005	4.23	4.23	—	114	114	< 0.005	0.02	< 0.005	119
Hauling	0.04	0.04	1.61	0.40	0.01	0.03	374	374	0.03	37.4	37.4	—	1,305	1,305	< 0.005	0.20	0.08	1,364
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.36	0.00	0.00	186	186	0.00	18.5	18.5	—	138	138	< 0.005	< 0.005	0.01	138
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	7.73	7.73	< 0.005	0.77	0.77	—	18.8	18.8	< 0.005	< 0.005	< 0.005	19.6
Hauling	0.01	0.01	0.29	0.07	< 0.005	0.01	68.2	68.2	0.01	6.82	6.82	—	216	216	< 0.005	0.03	0.01	226

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Remove	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Linear, Grubbing & Land Clearing	Linear, Grubbing & Land Clearing	1/1/2041	1/1/2042	5.00	261	—
Linear, Grading & Excavation	Linear, Grading & Excavation	1/2/2042	7/2/2046	5.00	1,173	—
Linear, Drainage, Utilities, & Sub-Grade	Linear, Drainage, Utilities, & Sub-Grade	7/3/2046	7/1/2049	5.00	782	—
Linear, Paving	Linear, Paving	7/2/2049	12/31/2050	5.00	391	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Linear, Grubbing & Land Clearing	Crawler Tractors	Diesel	Tier 4 Final	3.00	8.00	87.0	0.43
Linear, Grubbing & Land Clearing	Excavators	Diesel	Tier 4 Final	5.00	8.00	36.0	0.38
Linear, Grubbing & Land Clearing	Signal Boards	Electric	Average	23.0	8.00	6.00	0.82
Linear, Grading & Excavation	Crawler Tractors	Diesel	Tier 4 Final	4.00	8.00	87.0	0.43
Linear, Grading & Excavation	Excavators	Diesel	Tier 4 Final	10.0	8.00	36.0	0.38

Linear, Grading & Excavation	Graders	Diesel	Tier 4 Final	5.00	8.00	148	0.41
Linear, Grading & Excavation	Rollers	Diesel	Tier 4 Final	7.00	8.00	36.0	0.38
Linear, Grading & Excavation	Rubber Tired Loaders	Diesel	Tier 4 Final	5.00	8.00	150	0.36
Linear, Grading & Excavation	Scrapers	Diesel	Tier 4 Final	8.00	8.00	423	0.48
Linear, Grading & Excavation	Signal Boards	Electric	Average	23.0	8.00	6.00	0.82
Linear, Grading & Excavation	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	8.00	8.00	84.0	0.37
Linear, Grading & Excavation	Cranes	Diesel	Tier 4 Final	1.00	8.00	367	0.29
Linear, Drainage, Utilities, & Sub-Grade	Air Compressors	Diesel	Tier 4 Final	3.00	8.00	37.0	0.48
Linear, Drainage, Utilities, & Sub-Grade	Generator Sets	Diesel	Tier 4 Final	3.00	8.00	25.0	0.74
Linear, Drainage, Utilities, & Sub-Grade	Graders	Diesel	Tier 4 Final	4.00	8.00	148	0.41
Linear, Drainage, Utilities, & Sub-Grade	Plate Compactors	Diesel	Tier 4 Final	3.00	8.00	25.0	0.43
Linear, Drainage, Utilities, & Sub-Grade	Pumps	Diesel	Tier 4 Final	3.00	8.00	25.0	0.74
Linear, Drainage, Utilities, & Sub-Grade	Rough Terrain Forklifts	Diesel	Tier 4 Final	3.00	8.00	96.0	0.40
Linear, Drainage, Utilities, & Sub-Grade	Scrapers	Diesel	Tier 4 Final	7.00	8.00	423	0.48
Linear, Drainage, Utilities, & Sub-Grade	Signal Boards	Electric	Average	23.0	8.00	6.00	0.82
Linear, Drainage, Utilities, & Sub-Grade	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	7.00	8.00	84.0	0.37
Linear, Paving	Pavers	Diesel	Tier 4 Final	3.00	8.00	81.0	0.42
Linear, Paving	Paving Equipment	Diesel	Tier 4 Final	3.00	8.00	89.0	0.36

Linear, Paving	Rollers	Diesel	Tier 4 Final	6.00	8.00	36.0	0.38
Linear, Paving	Signal Boards	Electric	Average	23.0	8.00	6.00	0.82
Linear, Paving	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	7.00	8.00	84.0	0.37

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Linear, Grubbing & Land Clearing	—	—	—	—
Linear, Grubbing & Land Clearing	Worker	78.0	18.5	LDA,LDT1,LDT2
Linear, Grubbing & Land Clearing	Vendor	8.00	10.2	HHDT,MHDT
Linear, Grubbing & Land Clearing	Hauling	8.00	20.0	HHDT
Linear, Grubbing & Land Clearing	Onsite truck	—	—	HHDT
Linear, Grading & Excavation	—	—	—	—
Linear, Grading & Excavation	Worker	178	18.5	LDA,LDT1,LDT2
Linear, Grading & Excavation	Vendor	12.0	10.2	HHDT,MHDT
Linear, Grading & Excavation	Hauling	2.00	20.0	HHDT
Linear, Grading & Excavation	Onsite truck	—	—	HHDT
Linear, Drainage, Utilities, & Sub-Grade	—	—	—	—
Linear, Drainage, Utilities, & Sub-Grade	Worker	140	18.5	LDA,LDT1,LDT2
Linear, Drainage, Utilities, & Sub-Grade	Vendor	8.00	10.2	HHDT,MHDT
Linear, Drainage, Utilities, & Sub-Grade	Hauling	4.00	20.0	HHDT
Linear, Drainage, Utilities, & Sub-Grade	Onsite truck	—	—	HHDT
Linear, Paving	—	—	—	—

Linear, Paving	Worker	106	18.5	LDA,LDT1,LDT2
Linear, Paving	Vendor	8.00	10.2	HHDT,MHDT
Linear, Paving	Hauling	36.0	20.0	HHDT
Linear, Paving	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Control Strategies Applied	PM10 Reduction	PM2.5 Reduction
Water unpaved roads twice daily	74%	74%
Limit vehicle speeds on unpaved roads to 25 mph	44%	44%
Sweep paved roads once per month	9%	9%

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Linear, Paving	0.00	0.00	0.00	0.00	325,291

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Linear, Grubbing & Land Clearing	—	15,000	113	0.00	—
Linear, Grading & Excavation	—	15,000	113	0.00	—
Linear, Drainage, Utilities, & Sub-Grade	—	15,000	113	0.00	—

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	3	74%	74%
Water Demolished Area	2	36%	36%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Road Construction	61.7	100%
Road Widening	62.3	100%
Bridge/Overpass Construction	0.44	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2045	675	457	0.03	< 0.005
2046	1,350	457	0.03	< 0.005
2047	675	457	0.03	< 0.005
2048	675	457	0.03	< 0.005
2049	1,350	457	0.03	< 0.005
2041	675	457	0.03	< 0.005
2042	1,350	457	0.03	< 0.005
2043	675	457	0.03	< 0.005
2044	675	457	0.03	< 0.005
2050	675	457	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	32.8	annual days of extreme heat
Extreme Precipitation	0.00	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.19	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A

Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	11.6
AQ-PM	19.1
AQ-DPM	9.09
Drinking Water	30.6
Lead Risk Housing	50.8
Pesticides	90.5
Toxic Releases	7.58
Traffic	3.06
Effect Indicators	—
CleanUp Sites	74.2
Groundwater	77.9
Haz Waste Facilities/Generators	93.2
Impaired Water Bodies	100.0
Solid Waste	86.5

Sensitive Population	—
Asthma	87.6
Cardio-vascular	83.2
Low Birth Weights	26.9
Socioeconomic Factor Indicators	—
Education	82.7
Housing	51.4
Linguistic	88.8
Poverty	94.9
Unemployment	99.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	16.66880534
Employed	7.173104068
Median HI	5.299627871
Education	—
Bachelor's or higher	5.017323239
High school enrollment	16.8741178
Preschool enrollment	68.89516233
Transportation	—
Auto Access	18.40112922
Active commuting	51.10997049
Social	—
2-parent households	13.28114975
Voting	16.79712563

Neighborhood	—
Alcohol availability	70.25535737
Park access	33.85089183
Retail density	4.311561658
Supermarket access	49.58295907
Tree canopy	0.782753753
Housing	—
Homeownership	38.3036058
Housing habitability	30.96368536
Low-inc homeowner severe housing cost burden	26.76761196
Low-inc renter severe housing cost burden	52.89362248
Uncrowded housing	38.58591043
Health Outcomes	—
Insured adults	21.00603105
Arthritis	0.0
Asthma ER Admissions	30.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	41.7
Cognitively Disabled	50.3
Physically Disabled	19.5
Heart Attack ER Admissions	46.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0

Obesity	0.0
Pedestrian Injuries	54.3
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	14.1
Elderly	42.0
English Speaking	18.7
Foreign-born	65.3
Outdoor Workers	5.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	85.8
Traffic Density	4.9
Traffic Access	23.0
Other Indices	—
Hardship	92.9
Other Decision Support	—
2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	82.0

Healthy Places Index Score for Project Location (b)	11.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Construction: Construction Phases	Land use data are based applicant-provided buildout assumptions. Phase 1 (2025-2029) represents 50% of 10-year buildout.
Construction: Off-Road Equipment	Tier 4 Final construction equipment assumed as part of the Lithium Valley Specific Plan.
Construction: Trips and VMT	Trips increased based on scaler per buildout methodology.
Construction: On-Road Fugitive Dust	All roads used by future developments projects within the Specific Plan Area would be required to be paved. Per ICAPCD guidance a value of 85% paved is assumed in the modeling to account for the high levels of entrained dust generated from vehicle travel on paved roadways in the region. PM reductions altered based on dust control plan implementation strategies (watering unpaved roads three times per day).
Construction: Paving	Paved area acreages calculated based on buildout estimates. Conservatively assumed 100% asphalt.
Construction: Off-Road Equipment EF	Assumed 2050 emission factors for years 2051-2054.
Construction: Architectural Coatings	Assumed 6% of total area for striping.
Construction: Dust From Material Movement	Export quantities for Phase 3 roadways and infrastructure construction.

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Lithium Valley Operation - Phase 1 - Parks
Operational Year	2035
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	4.80
Location	33.18829759139308, -115.6026869228474
County	Imperial
City	Unincorporated
Air District	Imperial County APCD
Air Basin	Salton Sea
TAZ	5600
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
City Park	53.1	Acre	53.1	0.00	2,083,778	2,083,778	—	—
Parking Lot	232	1000sqft	5.32	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.75	1.70	0.49	6.19	0.02	0.01	266	266	0.01	26.7	26.7	2.46	1,929	1,932	0.30	0.07	2.22	1,961
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.68	1.64	0.55	3.97	0.02	0.01	266	266	0.01	26.7	26.7	2.46	1,713	1,716	0.30	0.07	0.06	1,744
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.50	1.48	0.28	2.48	0.01	0.01	138	138	< 0.005	13.9	13.9	2.46	1,014	1,016	0.28	0.04	0.50	1,035
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.27	0.27	0.05	0.45	< 0.005	< 0.005	25.2	25.2	< 0.005	2.53	2.53	0.41	168	168	0.05	0.01	0.08	171

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.47	0.43	0.49	6.19	0.02	0.01	266	266	0.01	26.7	26.7	—	1,787	1,787	0.04	0.06	2.22	1,809

Area	1.28	1.28	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	137	137	0.02	< 0.005	—	138
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	5.60	5.60	< 0.005	< 0.005	—	5.65
Waste	—	—	—	—	—	—	—	—	—	—	—	2.46	0.00	2.46	0.25	0.00	—	8.62
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	1.75	1.70	0.49	6.19	0.02	0.01	266	266	0.01	26.7	26.7	2.46	1,929	1,932	0.30	0.07	2.22	1,961
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.40	0.36	0.55	3.97	0.02	0.01	266	266	0.01	26.7	26.7	—	1,570	1,570	0.04	0.07	0.06	1,591
Area	1.28	1.28	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	137	137	0.02	< 0.005	—	138
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	5.60	5.60	< 0.005	< 0.005	—	5.65
Waste	—	—	—	—	—	—	—	—	—	—	—	2.46	0.00	2.46	0.25	0.00	—	8.62
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	1.68	1.64	0.55	3.97	0.02	0.01	266	266	0.01	26.7	26.7	2.46	1,713	1,716	0.30	0.07	0.06	1,744
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.22	0.20	0.28	2.48	0.01	0.01	138	138	< 0.005	13.9	13.9	—	871	871	0.02	0.03	0.50	883
Area	1.28	1.28	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	137	137	0.02	< 0.005	—	138
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	5.60	5.60	< 0.005	< 0.005	—	5.65
Waste	—	—	—	—	—	—	—	—	—	—	—	2.46	0.00	2.46	0.25	0.00	—	8.62
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	1.50	1.48	0.28	2.48	0.01	0.01	138	138	< 0.005	13.9	13.9	2.46	1,014	1,016	0.28	0.04	0.50	1,035
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.04	0.04	0.05	0.45	< 0.005	< 0.005	25.2	25.2	< 0.005	2.53	2.53	—	144	144	< 0.005	0.01	0.08	146
Area	0.23	0.23	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	22.7	22.7	< 0.005	< 0.005	—	22.9

Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.93	0.93	< 0.005	< 0.005	—	0.94
Waste	—	—	—	—	—	—	—	—	—	—	—	0.41	0.00	0.41	0.04	0.00	—	1.43
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	0.27	0.27	0.05	0.45	< 0.005	< 0.005	25.2	25.2	< 0.005	2.53	2.53	0.41	168	168	0.05	0.01	0.08	171

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	0.47	0.43	0.49	6.19	0.02	0.01	266	266	0.01	26.7	26.7	—	1,787	1,787	0.04	0.06	2.22	1,809
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.47	0.43	0.49	6.19	0.02	0.01	266	266	0.01	26.7	26.7	—	1,787	1,787	0.04	0.06	2.22	1,809
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	0.40	0.36	0.55	3.97	0.02	0.01	266	266	0.01	26.7	26.7	—	1,570	1,570	0.04	0.07	0.06	1,591
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.40	0.36	0.55	3.97	0.02	0.01	266	266	0.01	26.7	26.7	—	1,570	1,570	0.04	0.07	0.06	1,591
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	0.04	0.04	0.05	0.45	< 0.005	< 0.005	25.2	25.2	< 0.005	2.53	2.53	—	144	144	< 0.005	0.01	0.08	146

Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.04	0.04	0.05	0.45	< 0.005	< 0.005	25.2	25.2	< 0.005	2.53	2.53	—	144	144	< 0.005	0.01	0.08	146

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	137	137	0.02	< 0.005	—	138
Total	—	—	—	—	—	—	—	—	—	—	—	—	137	137	0.02	< 0.005	—	138
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	137	137	0.02	< 0.005	—	138
Total	—	—	—	—	—	—	—	—	—	—	—	—	137	137	0.02	< 0.005	—	138
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	22.7	22.7	< 0.005	< 0.005	—	22.9
Total	—	—	—	—	—	—	—	—	—	—	—	—	22.7	22.7	< 0.005	< 0.005	—	22.9

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	1.25	1.25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.03	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	1.28	1.28	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	1.25	1.25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.03	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	1.28	1.28	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.23	0.23	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.01	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Landscape	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.23	0.23	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	5.60	5.60	< 0.005	< 0.005	—	5.65
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	5.60	5.60	< 0.005	< 0.005	—	5.65
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	5.60	5.60	< 0.005	< 0.005	—	5.65
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	5.60	5.60	< 0.005	< 0.005	—	5.65
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.93	0.93	< 0.005	< 0.005	—	0.94
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.93	0.93	< 0.005	< 0.005	—	0.94

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	2.46	0.00	2.46	0.25	0.00	—	8.62
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	2.46	0.00	2.46	0.25	0.00	—	8.62
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	2.46	0.00	2.46	0.25	0.00	—	8.62
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	2.46	0.00	2.46	0.25	0.00	—	8.62
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	0.41	0.00	0.41	0.04	0.00	—	1.43
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.41	0.00	0.41	0.04	0.00	—	1.43

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Remove	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
City Park	41.5	104	116	22,310	844	2,122	2,371	454,421
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	3,000	1,000	13,892

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	270

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
City Park	0.00	247	0.0330	0.0040	0.00
Parking Lot	202,820	247	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
City Park	0.00	2,577,452
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)

City Park	4.57	—
Parking Lot	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
City Park	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
City Park	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	32.8	annual days of extreme heat
Extreme Precipitation	0.00	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.19	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A

Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	11.6
AQ-PM	19.1
AQ-DPM	9.09
Drinking Water	30.6
Lead Risk Housing	50.8
Pesticides	90.5
Toxic Releases	7.58
Traffic	3.06
Effect Indicators	—
CleanUp Sites	74.2
Groundwater	77.9

Haz Waste Facilities/Generators	93.2
Impaired Water Bodies	100.0
Solid Waste	86.5
Sensitive Population	—
Asthma	87.6
Cardio-vascular	83.2
Low Birth Weights	26.9
Socioeconomic Factor Indicators	—
Education	82.7
Housing	51.4
Linguistic	88.8
Poverty	94.9
Unemployment	99.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	16.66880534
Employed	7.173104068
Median HI	5.299627871
Education	—
Bachelor's or higher	5.017323239
High school enrollment	16.8741178
Preschool enrollment	68.89516233
Transportation	—
Auto Access	18.40112922
Active commuting	51.10997049

Social	—
2-parent households	13.28114975
Voting	16.79712563
Neighborhood	—
Alcohol availability	70.25535737
Park access	33.85089183
Retail density	4.311561658
Supermarket access	49.58295907
Tree canopy	0.782753753
Housing	—
Homeownership	38.3036058
Housing habitability	30.96368536
Low-inc homeowner severe housing cost burden	26.76761196
Low-inc renter severe housing cost burden	52.89362248
Uncrowded housing	38.58591043
Health Outcomes	—
Insured adults	21.00603105
Arthritis	0.0
Asthma ER Admissions	30.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	41.7
Cognitively Disabled	50.3
Physically Disabled	19.5

Heart Attack ER Admissions	46.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	54.3
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	14.1
Elderly	42.0
English Speaking	18.7
Foreign-born	65.3
Outdoor Workers	5.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	85.8
Traffic Density	4.9
Traffic Access	23.0
Other Indices	—
Hardship	92.9
Other Decision Support	—
2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	82.0
Healthy Places Index Score for Project Location (b)	11.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Land use data are based on applicant-provided buildout assumptions.
Operations: Vehicle Data	Based on SANDAG trip rate for regional, developed park. Defaults for trip length were not changed.
Operations: Road Dust	85% of roads assumed to be paved based on ICAPCD guidance and project narrative.
Operations: Landscape Equipment	Assumed 270 summer days for desert region.
Operations: Water and Waste Water	Water data are based on applicant-provided calculations for the land use.

Lithium Valley Operation - Phase 1 - Agrivoltaics Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Lithium Valley Operation - Phase 1 - Agrivoltaics
Operational Year	2035
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	4.80
Location	33.18829759139308, -115.6026869228474
County	Imperial
City	Unincorporated
Air District	Imperial County APCD
Air Basin	Salton Sea
TAZ	5600
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
General Heavy Industry	10.0	1000sqft	354	10,000	2,000	—	—	—
Parking Lot	20.0	1000sqft	0.46	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.34	0.34	0.01	0.56	< 0.005	< 0.005	5.39	5.39	< 0.005	0.54	0.54	6.68	327	334	0.71	0.01	0.28	354
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.26	0.26	0.01	0.08	< 0.005	< 0.005	5.39	5.39	< 0.005	0.54	0.54	6.68	321	328	0.71	0.01	0.23	348
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.32	0.31	0.01	0.39	< 0.005	< 0.005	3.80	3.80	< 0.005	0.38	0.38	6.68	315	321	0.71	0.01	0.25	341
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.06	0.06	< 0.005	0.07	< 0.005	< 0.005	0.69	0.69	< 0.005	0.07	0.07	1.11	52.1	53.2	0.12	< 0.005	0.04	56.5

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.01	0.01	0.01	0.12	< 0.005	< 0.005	5.39	5.39	< 0.005	0.54	0.54	—	36.1	36.1	< 0.005	< 0.005	0.04	36.5

Area	0.33	0.33	< 0.005	0.43	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.79	1.79	< 0.005	< 0.005	—	1.79
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	281	281	0.04	< 0.005	—	284
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	8.26	8.26	< 0.005	< 0.005	—	8.33
Waste	—	—	—	—	—	—	—	—	—	—	—	6.68	0.00	6.68	0.67	0.00	—	23.4
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.23	0.23
Total	0.34	0.34	0.01	0.56	< 0.005	< 0.005	5.39	5.39	< 0.005	0.54	0.54	6.68	327	334	0.71	0.01	0.28	354
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.01	0.01	0.01	0.08	< 0.005	< 0.005	5.39	5.39	< 0.005	0.54	0.54	—	31.7	31.7	< 0.005	< 0.005	< 0.005	32.1
Area	0.26	0.26	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	281	281	0.04	< 0.005	—	284
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	8.26	8.26	< 0.005	< 0.005	—	8.33
Waste	—	—	—	—	—	—	—	—	—	—	—	6.68	0.00	6.68	0.67	0.00	—	23.4
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.23	0.23
Total	0.26	0.26	0.01	0.08	< 0.005	< 0.005	5.39	5.39	< 0.005	0.54	0.54	6.68	321	328	0.71	0.01	0.23	348
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.01	< 0.005	0.01	0.07	< 0.005	< 0.005	3.80	3.80	< 0.005	0.38	0.38	—	23.9	23.9	< 0.005	< 0.005	0.01	24.3
Area	0.31	0.31	< 0.005	0.32	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.32	1.32	< 0.005	< 0.005	—	1.33
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	281	281	0.04	< 0.005	—	284
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	8.26	8.26	< 0.005	< 0.005	—	8.33
Waste	—	—	—	—	—	—	—	—	—	—	—	6.68	0.00	6.68	0.67	0.00	—	23.4
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.23	0.23
Total	0.32	0.31	0.01	0.39	< 0.005	< 0.005	3.80	3.80	< 0.005	0.38	0.38	6.68	315	321	0.71	0.01	0.25	341
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	0.69	0.69	< 0.005	0.07	0.07	—	3.96	3.96	< 0.005	< 0.005	< 0.005	4.02
Area	0.06	0.06	< 0.005	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.22	0.22	< 0.005	< 0.005	—	0.22
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	46.6	46.6	0.01	< 0.005	—	46.9

Water	—	—	—	—	—	—	—	—	—	—	—	0.00	1.37	1.37	< 0.005	< 0.005	—	1.38
Waste	—	—	—	—	—	—	—	—	—	—	—	1.11	0.00	1.11	0.11	0.00	—	3.87
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.04	0.04
Total	0.06	0.06	< 0.005	0.07	< 0.005	< 0.005	0.69	0.69	< 0.005	0.07	0.07	1.11	52.1	53.2	0.12	< 0.005	0.04	56.5

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Mobile source emissions results are presented in Sections 2.6. No further detailed breakdown of emissions is available.

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	269	269	0.04	< 0.005	—	272
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	11.8	11.8	< 0.005	< 0.005	—	11.9
Total	—	—	—	—	—	—	—	—	—	—	—	—	281	281	0.04	< 0.005	—	284
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	269	269	0.04	< 0.005	—	272

Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	11.8	11.8	< 0.005	< 0.005	—	11.9
Total	—	—	—	—	—	—	—	—	—	—	—	—	281	281	0.04	< 0.005	—	284
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	44.6	44.6	0.01	< 0.005	—	45.0
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	1.96	1.96	< 0.005	< 0.005	—	1.98
Total	—	—	—	—	—	—	—	—	—	—	—	—	46.6	46.6	0.01	< 0.005	—	46.9

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.22	0.22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.04	0.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.08	0.07	< 0.005	0.43	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.79	1.79	< 0.005	< 0.005	—	1.79
Total	0.33	0.33	< 0.005	0.43	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.79	1.79	< 0.005	< 0.005	—	1.79
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.22	0.22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architect Coatings	0.04	0.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.26	0.26	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.04	0.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.01	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.01	0.01	< 0.005	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.22	0.22	< 0.005	< 0.005	—	0.22
Total	0.06	0.06	< 0.005	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.22	0.22	< 0.005	< 0.005	—	0.22

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	0.00	8.26	8.26	< 0.005	< 0.005	—	8.33
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	8.26	8.26	< 0.005	< 0.005	—	8.33

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	0.00	8.26	8.26	< 0.005	< 0.005	—	8.33
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	8.26	8.26	< 0.005	< 0.005	—	8.33
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	0.00	1.37	1.37	< 0.005	< 0.005	—	1.38
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	1.37	1.37	< 0.005	< 0.005	—	1.38

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	6.68	0.00	6.68	0.67	0.00	—	23.4
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	6.68	0.00	6.68	0.67	0.00	—	23.4

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	6.68	0.00	6.68	0.67	0.00	—	23.4
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	6.68	0.00	6.68	0.67	0.00	—	23.4
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	1.11	0.00	1.11	0.11	0.00	—	3.87
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1.11	0.00	1.11	0.11	0.00	—	3.87

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.23	0.23
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.23	0.23
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.23	0.23
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.23	0.23
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.04	0.04
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.04	0.04

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipm Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Remove	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Total all Land Uses	2.00	0.00	0.00	520	48.0	0.00	0.00	12,514

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	15,000	5,000	1,200

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	270

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
General Heavy Industry	398,947	247	0.0330	0.0040	0.00
Parking Lot	17,520	247	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
General Heavy Industry	0.00	3,801,461
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
General Heavy Industry	12.4	—
Parking Lot	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
General Heavy Industry	User Defined	User Defined	23,900	0.01	0.50	0.50	30.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
Emergency Generator	Diesel	1.00	1.00	50.0	500	0.73

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	32.8	annual days of extreme heat
Extreme Precipitation	0.00	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.19	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A

Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	11.6
AQ-PM	19.1
AQ-DPM	9.09
Drinking Water	30.6
Lead Risk Housing	50.8
Pesticides	90.5
Toxic Releases	7.58
Traffic	3.06
Effect Indicators	—
CleanUp Sites	74.2
Groundwater	77.9
Haz Waste Facilities/Generators	93.2
Impaired Water Bodies	100.0
Solid Waste	86.5
Sensitive Population	—
Asthma	87.6
Cardio-vascular	83.2
Low Birth Weights	26.9
Socioeconomic Factor Indicators	—
Education	82.7
Housing	51.4
Linguistic	88.8

Poverty	94.9
Unemployment	99.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	16.66880534
Employed	7.173104068
Median HI	5.299627871
Education	—
Bachelor's or higher	5.017323239
High school enrollment	16.8741178
Preschool enrollment	68.89516233
Transportation	—
Auto Access	18.40112922
Active commuting	51.10997049
Social	—
2-parent households	13.28114975
Voting	16.79712563
Neighborhood	—
Alcohol availability	70.25535737
Park access	33.85089183
Retail density	4.311561658
Supermarket access	49.58295907
Tree canopy	0.782753753
Housing	—
Homeownership	38.3036058

Housing habitability	30.96368536
Low-inc homeowner severe housing cost burden	26.76761196
Low-inc renter severe housing cost burden	52.89362248
Uncrowded housing	38.58591043
Health Outcomes	—
Insured adults	21.00603105
Arthritis	0.0
Asthma ER Admissions	30.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	41.7
Cognitively Disabled	50.3
Physically Disabled	19.5
Heart Attack ER Admissions	46.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	54.3
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0

Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	14.1
Elderly	42.0
English Speaking	18.7
Foreign-born	65.3
Outdoor Workers	5.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	85.8
Traffic Density	4.9
Traffic Access	23.0
Other Indices	—
Hardship	92.9
Other Decision Support	—
2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	82.0
Healthy Places Index Score for Project Location (b)	11.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Land use data are based on applicant-provided buildout assumptions. 10,000 square feet of building anticipated for operation. No landscaping anticipated for agrivoltaics
Operations: Water and Waste Water	Water consumption calculated by applicant. No indoor water usage anticipated.
Operations: Refrigerants	Assumed 500lbs. of SF6 for project operations.
Operations: Landscape Equipment	Assumed 270 summer days for desert region.
Operations: Emergency Generators and Fire Pumps	Assumed 1 back-up generator operating 1 hour/day and 50 hours/year for maintne
Operations: Energy Use	Natural gas not anticipated as part of project operations. Natural gas consumption converted to electricity.
Operations: Road Dust	All roads used by future developments projects within the Specific Plan Area would be required to be paved. Per ICAPCD guidance a value of 85% paved is assumed in the modeling to account for the high levels of entrained dust generated from vehicle travel on paved roadways in the region

Lithium Valley Operation - Phase 1 - Anaerobic Digester Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Lithium Valley Operation - Phase 1 - Anaerobic Digester
Operational Year	2035
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	4.80
Location	33.18829759139308, -115.6026869228474
County	Imperial
City	Unincorporated
Air District	Imperial County APCD
Air Basin	Salton Sea
TAZ	5600
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
General Heavy Industry	50.0	1000sqft	292	50,000	10,000	—	—	—
Parking Lot	100	1000sqft	2.30	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	5.75	5.33	4.68	55.9	0.15	0.12	2,296	2,296	0.11	231	231	726	18,195	18,921	75.0	2.28	32.1	21,507
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.78	4.41	5.22	34.6	0.14	0.12	2,296	2,296	0.11	231	231	726	16,322	17,048	75.0	2.30	13.5	19,623
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.13	3.83	3.65	30.3	0.10	0.09	1,571	1,571	0.09	158	158	726	12,705	13,431	74.9	2.12	18.7	15,954
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.75	0.70	0.67	5.52	0.02	0.02	287	287	0.02	28.8	28.8	120	2,103	2,224	12.4	0.35	3.10	2,641

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	4.03	3.67	4.23	53.4	0.15	0.08	2,296	2,296	0.08	231	231	—	15,410	15,410	0.30	0.55	19.1	15,602

Area	1.67	1.64	0.02	2.17	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.94	8.94	< 0.005	< 0.005	—	8.97
Energy	0.05	0.02	0.44	0.37	< 0.005	0.03	—	0.03	0.03	—	0.03	—	1,605	1,605	0.19	0.02	—	1,616
Water	—	—	—	—	—	—	—	—	—	—	—	693	1,170	1,863	71.2	1.71	—	4,151
Waste	—	—	—	—	—	—	—	—	—	—	—	33.4	0.00	33.4	3.34	0.00	—	117
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13.0	13.0
Total	5.75	5.33	4.68	55.9	0.15	0.12	2,296	2,296	0.11	231	231	726	18,195	18,921	75.0	2.28	32.1	21,507
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	3.46	3.10	4.78	34.2	0.13	0.08	2,296	2,296	0.08	231	231	—	13,546	13,546	0.31	0.58	0.50	13,727
Area	1.28	1.28	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.05	0.02	0.44	0.37	< 0.005	0.03	—	0.03	0.03	—	0.03	—	1,605	1,605	0.19	0.02	—	1,616
Water	—	—	—	—	—	—	—	—	—	—	—	693	1,170	1,863	71.2	1.71	—	4,151
Waste	—	—	—	—	—	—	—	—	—	—	—	33.4	0.00	33.4	3.34	0.00	—	117
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13.0	13.0
Total	4.78	4.41	5.22	34.6	0.14	0.12	2,296	2,296	0.11	231	231	726	16,322	17,048	75.0	2.30	13.5	19,623
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	2.51	2.27	3.20	28.3	0.10	0.06	1,571	1,571	0.05	158	158	—	9,922	9,922	0.21	0.39	5.73	10,051
Area	1.57	1.54	0.01	1.61	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.61	6.61	< 0.005	< 0.005	—	6.64
Energy	0.05	0.02	0.44	0.37	< 0.005	0.03	—	0.03	0.03	—	0.03	—	1,605	1,605	0.19	0.02	—	1,616
Water	—	—	—	—	—	—	—	—	—	—	—	693	1,170	1,863	71.2	1.71	—	4,151
Waste	—	—	—	—	—	—	—	—	—	—	—	33.4	0.00	33.4	3.34	0.00	—	117
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13.0	13.0
Total	4.13	3.83	3.65	30.3	0.10	0.09	1,571	1,571	0.09	158	158	726	12,705	13,431	74.9	2.12	18.7	15,954
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.46	0.41	0.58	5.16	0.02	0.01	287	287	0.01	28.8	28.8	—	1,643	1,643	0.03	0.07	0.95	1,664
Area	0.29	0.28	< 0.005	0.29	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.10	1.10	< 0.005	< 0.005	—	1.10
Energy	0.01	< 0.005	0.08	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	266	266	0.03	< 0.005	—	268

Water	—	—	—	—	—	—	—	—	—	—	—	115	194	308	11.8	0.28	—	687
Waste	—	—	—	—	—	—	—	—	—	—	—	5.53	0.00	5.53	0.55	0.00	—	19.4
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.15	2.15
Total	0.75	0.70	0.67	5.52	0.02	0.02	287	287	0.02	28.8	28.8	120	2,103	2,224	12.4	0.35	3.10	2,641

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	4.03	3.67	4.23	53.4	0.15	0.08	2,296	2,296	0.08	231	231	—	15,410	15,410	0.30	0.55	19.1	15,602
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	4.03	3.67	4.23	53.4	0.15	0.08	2,296	2,296	0.08	231	231	—	15,410	15,410	0.30	0.55	19.1	15,602
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	3.46	3.10	4.78	34.2	0.13	0.08	2,296	2,296	0.08	231	231	—	13,546	13,546	0.31	0.58	0.50	13,727
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	3.46	3.10	4.78	34.2	0.13	0.08	2,296	2,296	0.08	231	231	—	13,546	13,546	0.31	0.58	0.50	13,727
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	0.46	0.41	0.58	5.16	0.02	0.01	287	287	0.01	28.8	28.8	—	1,643	1,643	0.03	0.07	0.95	1,664
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.46	0.41	0.58	5.16	0.02	0.01	287	287	0.01	28.8	28.8	—	1,643	1,643	0.03	0.07	0.95	1,664

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	1,026	1,026	0.14	0.02	—	1,034
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	59.2	59.2	0.01	< 0.005	—	59.6
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,085	1,085	0.15	0.02	—	1,094
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	1,026	1,026	0.14	0.02	—	1,034
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	59.2	59.2	0.01	< 0.005	—	59.6
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,085	1,085	0.15	0.02	—	1,094
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	170	170	0.02	< 0.005	—	171
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	9.79	9.79	< 0.005	< 0.005	—	9.88
Total	—	—	—	—	—	—	—	—	—	—	—	—	180	180	0.02	< 0.005	—	181

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.05	0.02	0.44	0.37	< 0.005	0.03	—	0.03	0.03	—	0.03	—	521	521	0.05	< 0.005	—	522
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.05	0.02	0.44	0.37	< 0.005	0.03	—	0.03	0.03	—	0.03	—	521	521	0.05	< 0.005	—	522
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.05	0.02	0.44	0.37	< 0.005	0.03	—	0.03	0.03	—	0.03	—	521	521	0.05	< 0.005	—	522
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.05	0.02	0.44	0.37	< 0.005	0.03	—	0.03	0.03	—	0.03	—	521	521	0.05	< 0.005	—	522
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.01	< 0.005	0.08	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	86.2	86.2	0.01	< 0.005	—	86.4

Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.01	< 0.005	0.08	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	86.2	86.2	0.01	< 0.005	—	86.4

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	1.08	1.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.20	0.20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.39	0.36	0.02	2.17	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.94	8.94	< 0.005	< 0.005	—	8.97
Total	1.67	1.64	0.02	2.17	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.94	8.94	< 0.005	< 0.005	—	8.97
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	1.08	1.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.20	0.20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	1.28	1.28	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.20	0.20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.04	0.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.05	0.05	< 0.005	0.29	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.10	1.10	< 0.005	< 0.005	—	1.10
Total	0.29	0.28	< 0.005	0.29	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.10	1.10	< 0.005	< 0.005	—	1.10

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	693	1,170	1,863	71.2	1.71	—	4,151
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	693	1,170	1,863	71.2	1.71	—	4,151
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	693	1,170	1,863	71.2	1.71	—	4,151
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	693	1,170	1,863	71.2	1.71	—	4,151
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	115	194	308	11.8	0.28	—	687
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	115	194	308	11.8	0.28	—	687

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	33.4	0.00	33.4	3.34	0.00	—	117
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	33.4	0.00	33.4	3.34	0.00	—	117
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	33.4	0.00	33.4	3.34	0.00	—	117
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	33.4	0.00	33.4	3.34	0.00	—	117
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	5.53	0.00	5.53	0.55	0.00	—	19.4
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	5.53	0.00	5.53	0.55	0.00	—	19.4

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13.0	13.0
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13.0	13.0
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13.0	13.0
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13.0	13.0

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.15	2.15
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.15	2.15

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
General Heavy Industry	615	1,004	796	254,066	12,517	20,450	16,214	5,175,008
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	75,000	25,000	6,000

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	270

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
General Heavy Industry	1,518,721	247	0.0330	0.0040	1,624,230
Parking Lot	87,600	247	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
General Heavy Industry	361,435,032	6,398,733
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
General Heavy Industry	62.0	—
Parking Lot	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
General Heavy Industry	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	32.8	annual days of extreme heat
Extreme Precipitation	0.00	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.19	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A

Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	11.6
AQ-PM	19.1
AQ-DPM	9.09
Drinking Water	30.6
Lead Risk Housing	50.8
Pesticides	90.5
Toxic Releases	7.58
Traffic	3.06
Effect Indicators	—
CleanUp Sites	74.2
Groundwater	77.9
Haz Waste Facilities/Generators	93.2
Impaired Water Bodies	100.0
Solid Waste	86.5
Sensitive Population	—
Asthma	87.6
Cardio-vascular	83.2
Low Birth Weights	26.9
Socioeconomic Factor Indicators	—
Education	82.7
Housing	51.4
Linguistic	88.8
Poverty	94.9
Unemployment	99.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	16.66880534
Employed	7.173104068
Median HI	5.299627871
Education	—
Bachelor's or higher	5.017323239
High school enrollment	16.8741178
Preschool enrollment	68.89516233
Transportation	—
Auto Access	18.40112922
Active commuting	51.10997049
Social	—
2-parent households	13.28114975
Voting	16.79712563
Neighborhood	—
Alcohol availability	70.25535737
Park access	33.85089183
Retail density	4.311561658
Supermarket access	49.58295907
Tree canopy	0.782753753
Housing	—
Homeownership	38.3036058
Housing habitability	30.96368536
Low-inc homeowner severe housing cost burden	26.76761196
Low-inc renter severe housing cost burden	52.89362248

Uncrowded housing	38.58591043
Health Outcomes	—
Insured adults	21.00603105
Arthritis	0.0
Asthma ER Admissions	30.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	41.7
Cognitively Disabled	50.3
Physically Disabled	19.5
Heart Attack ER Admissions	46.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	54.3
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0

Children	14.1
Elderly	42.0
English Speaking	18.7
Foreign-born	65.3
Outdoor Workers	5.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	85.8
Traffic Density	4.9
Traffic Access	23.0
Other Indices	—
Hardship	92.9
Other Decision Support	—
2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	82.0
Healthy Places Index Score for Project Location (b)	11.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Land use data are based on applicant-provided buildout assumptions.
Operations: Vehicle Data	Trip rates are based on ITE Land Use Code 170.
Operations: Landscape Equipment	Assumed 270 summer days for desert region.
Operations: Road Dust	All roads used by future developments projects within the Specific Plan Area would be required to be paved. Per ICAPCD guidance a value of 85% paved is assumed in the modeling to account for the high levels of entrained dust generated from vehicle travel on paved roadways in the region
Operations: Water and Waste Water	Water data are based on applicant-provided calculations for the land use.
Operations: Off-Road Equipment	Assumed a tractor/loader/backhoe as part of project operations.

Lithium Valley Operation - Phase 1 - Automobile Manufacturing Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Lithium Valley Operation - Phase 1 - Automobile Manufacturing
Operational Year	2035
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	4.80
Location	33.18829759139308, -115.6026869228474
County	Imperial
City	Unincorporated
Air District	Imperial County APCD
Air Basin	Salton Sea
TAZ	5600
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Manufacturing	240	1000sqft	147	239,691	119,846	—	—	—
Parking Lot	1,198	1000sqft	27.5	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	16.7	15.7	12.3	113	0.30	0.45	4,253	4,253	0.44	427	427	225	38,951	39,176	24.5	1.31	97.8	40,277
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	13.8	13.0	13.2	67.3	0.26	0.43	4,253	4,253	0.42	427	427	225	35,454	35,680	24.5	1.36	63.3	36,760
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	12.7	12.0	8.40	62.2	0.19	0.30	2,910	2,910	0.29	292	292	225	27,919	28,145	24.2	1.01	73.0	29,124
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.31	2.18	1.53	11.3	0.04	0.05	531	531	0.05	53.3	53.4	37.3	4,622	4,660	4.01	0.17	12.1	4,822

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	7.47	6.80	7.83	98.9	0.28	0.15	4,253	4,253	0.14	427	427	—	28,549	28,549	0.56	1.02	35.4	28,903

Area	8.13	7.99	0.09	10.4	< 0.005	0.02	—	0.02	0.01	—	0.01	—	42.9	42.9	< 0.005	< 0.005	—	43.0
Energy	0.23	0.12	2.09	1.76	0.01	0.16	—	0.16	0.16	—	0.16	—	9,827	9,827	1.20	0.12	—	9,894
Water	—	—	—	—	—	—	—	—	—	—	—	65.1	112	177	6.69	0.16	—	392
Waste	—	—	—	—	—	—	—	—	—	—	—	160	0.00	160	16.0	0.00	—	560
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	62.4	62.4
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	0.90	0.82	2.29	2.09	< 0.005	0.12	0.00	0.12	0.12	0.00	0.12	0.00	420	420	0.02	< 0.005	0.00	421
Total	16.7	15.7	12.3	113	0.30	0.45	4,253	4,253	0.44	427	427	225	38,951	39,176	24.5	1.31	97.8	40,277
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	6.40	5.75	8.86	63.4	0.25	0.15	4,253	4,253	0.14	427	427	—	25,095	25,095	0.57	1.07	0.92	25,430
Area	6.27	6.27	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.23	0.12	2.09	1.76	0.01	0.16	—	0.16	0.16	—	0.16	—	9,827	9,827	1.20	0.12	—	9,894
Water	—	—	—	—	—	—	—	—	—	—	—	65.1	112	177	6.69	0.16	—	392
Waste	—	—	—	—	—	—	—	—	—	—	—	160	0.00	160	16.0	0.00	—	560
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	62.4	62.4
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	0.90	0.82	2.29	2.09	< 0.005	0.12	0.00	0.12	0.12	0.00	0.12	0.00	420	420	0.02	< 0.005	0.00	421
Total	13.8	13.0	13.2	67.3	0.26	0.43	4,253	4,253	0.42	427	427	225	35,454	35,680	24.5	1.36	63.3	36,760
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	4.65	4.20	5.93	52.4	0.18	0.11	2,910	2,910	0.10	292	292	—	18,382	18,382	0.39	0.73	10.6	18,620
Area	7.65	7.54	0.06	7.71	< 0.005	0.01	—	0.01	0.01	—	0.01	—	31.7	31.7	< 0.005	< 0.005	—	31.8
Energy	0.23	0.12	2.09	1.76	0.01	0.16	—	0.16	0.16	—	0.16	—	9,337	9,337	1.14	0.12	—	9,399
Water	—	—	—	—	—	—	—	—	—	—	—	65.1	112	177	6.69	0.16	—	392
Waste	—	—	—	—	—	—	—	—	—	—	—	160	0.00	160	16.0	0.00	—	560

Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	62.4	62.4
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	0.12	0.11	0.31	0.29	< 0.005	0.02	0.00	0.02	0.02	0.00	0.02	0.00	57.5	57.5	< 0.005	< 0.005	0.00	57.7
Total	12.7	12.0	8.40	62.2	0.19	0.30	2,910	2,910	0.29	292	292	225	27,919	28,145	24.2	1.01	73.0	29,124
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.85	0.77	1.08	9.57	0.03	0.02	531	531	0.02	53.3	53.3	—	3,043	3,043	0.06	0.12	1.76	3,083
Area	1.40	1.38	0.01	1.41	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.25	5.25	< 0.005	< 0.005	—	5.27
Energy	0.04	0.02	0.38	0.32	< 0.005	0.03	—	0.03	0.03	—	0.03	—	1,546	1,546	0.19	0.02	—	1,556
Water	—	—	—	—	—	—	—	—	—	—	—	10.8	18.5	29.3	1.11	0.03	—	64.9
Waste	—	—	—	—	—	—	—	—	—	—	—	26.5	0.00	26.5	2.65	0.00	—	92.8
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	10.3	10.3
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	0.02	0.02	0.06	0.05	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	9.52	9.52	< 0.005	< 0.005	0.00	9.55
Total	2.31	2.18	1.53	11.3	0.04	0.05	531	531	0.05	53.3	53.4	37.3	4,622	4,660	4.01	0.17	12.1	4,822

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Manufacturing	7.47	6.80	7.83	98.9	0.28	0.15	4,253	4,253	0.14	427	427	—	28,549	28,549	0.56	1.02	35.4	28,903
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	7.47	6.80	7.83	98.9	0.28	0.15	4,253	4,253	0.14	427	427	—	28,549	28,549	0.56	1.02	35.4	28,903
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	6.40	5.75	8.86	63.4	0.25	0.15	4,253	4,253	0.14	427	427	—	25,095	25,095	0.57	1.07	0.92	25,430
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	6.40	5.75	8.86	63.4	0.25	0.15	4,253	4,253	0.14	427	427	—	25,095	25,095	0.57	1.07	0.92	25,430
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	0.85	0.77	1.08	9.57	0.03	0.02	531	531	0.02	53.3	53.3	—	3,043	3,043	0.06	0.12	1.76	3,083
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.85	0.77	1.08	9.57	0.03	0.02	531	531	0.02	53.3	53.3	—	3,043	3,043	0.06	0.12	1.76	3,083

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	—	4,917	4,917	0.66	0.08	—	4,957
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	709	709	0.09	0.01	—	715

undefine	—	—	—	—	—	—	—	—	—	—	—	—	1,706	1,706	0.23	0.03	—	1,720
Total	—	—	—	—	—	—	—	—	—	—	—	—	7,332	7,332	0.98	0.12	—	7,392
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	—	4,917	4,917	0.66	0.08	—	4,957
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	709	709	0.09	0.01	—	715
undefined	—	—	—	—	—	—	—	—	—	—	—	—	1,706	1,706	0.23	0.03	—	1,720
Total	—	—	—	—	—	—	—	—	—	—	—	—	7,332	7,332	0.98	0.12	—	7,392
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	—	814	814	0.11	0.01	—	821
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	117	117	0.02	< 0.005	—	118
undefined	—	—	—	—	—	—	—	—	—	—	—	—	201	201	0.03	< 0.005	—	203
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,133	1,133	0.15	0.02	—	1,142

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	0.23	0.12	2.09	1.76	0.01	0.16	—	0.16	0.16	—	0.16	—	2,495	2,495	0.22	< 0.005	—	2,502
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.23	0.12	2.09	1.76	0.01	0.16	—	0.16	0.16	—	0.16	—	2,495	2,495	0.22	< 0.005	—	2,502

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	0.23	0.12	2.09	1.76	0.01	0.16	—	0.16	0.16	—	0.16	—	2,495	2,495	0.22	< 0.005	—	2,502
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.23	0.12	2.09	1.76	0.01	0.16	—	0.16	0.16	—	0.16	—	2,495	2,495	0.22	< 0.005	—	2,502
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	0.04	0.02	0.38	0.32	< 0.005	0.03	—	0.03	0.03	—	0.03	—	413	413	0.04	< 0.005	—	414
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.04	0.02	0.38	0.32	< 0.005	0.03	—	0.03	0.03	—	0.03	—	413	413	0.04	< 0.005	—	414

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	5.22	5.22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	1.05	1.05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	1.86	1.71	0.09	10.4	< 0.005	0.02	—	0.02	0.01	—	0.01	—	42.9	42.9	< 0.005	< 0.005	—	43.0

Total	8.13	7.99	0.09	10.4	< 0.005	0.02	—	0.02	0.01	—	0.01	—	42.9	42.9	< 0.005	< 0.005	—	43.0
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	5.22	5.22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	1.05	1.05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	6.27	6.27	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.95	0.95	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.19	0.19	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.25	0.23	0.01	1.41	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.25	5.25	< 0.005	< 0.005	—	5.27
Total	1.40	1.38	0.01	1.41	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.25	5.25	< 0.005	< 0.005	—	5.27

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	65.1	112	177	6.69	0.16	—	392
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	65.1	112	177	6.69	0.16	—	392
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	65.1	112	177	6.69	0.16	—	392
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	65.1	112	177	6.69	0.16	—	392
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	10.8	18.5	29.3	1.11	0.03	—	64.9
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	10.8	18.5	29.3	1.11	0.03	—	64.9

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	160	0.00	160	16.0	0.00	—	560

Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	160	0.00	160	16.0	0.00	—	560
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	160	0.00	160	16.0	0.00	—	560
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	160	0.00	160	16.0	0.00	—	560
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	26.5	0.00	26.5	2.65	0.00	—	92.8
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	26.5	0.00	26.5	2.65	0.00	—	92.8

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	62.4	62.4
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	62.4	62.4
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Manufac	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	62.4	62.4
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	62.4	62.4
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	10.3	10.3
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	10.3	10.3

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.90	0.82	2.29	2.09	< 0.005	0.12	0.00	0.12	0.12	0.00	0.12	0.00	420	420	0.02	< 0.005	0.00	421
Total	0.90	0.82	2.29	2.09	< 0.005	0.12	0.00	0.12	0.12	0.00	0.12	0.00	420	420	0.02	< 0.005	0.00	421
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.90	0.82	2.29	2.09	< 0.005	0.12	0.00	0.12	0.12	0.00	0.12	0.00	420	420	0.02	< 0.005	0.00	421
Total	0.90	0.82	2.29	2.09	< 0.005	0.12	0.00	0.12	0.12	0.00	0.12	0.00	420	420	0.02	< 0.005	0.00	421
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.02	0.02	0.06	0.05	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	9.52	9.52	< 0.005	< 0.005	0.00	9.55
Total	0.02	0.02	0.06	0.05	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	9.52	9.52	< 0.005	< 0.005	0.00	9.55

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Manufacturing	1,139	1,860	1,474	470,681	23,190	37,886	30,026	9,587,186
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	359,537	119,846	71,907

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	270

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Manufacturing	7,280,477	247	0.0330	0.0040	7,786,267
Parking Lot	1,049,842	247	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Manufacturing	33,986,665	1,504,230
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Manufacturing	297	—
Parking Lot	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Manufacturing	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Forklifts	Electric	Average	29.0	8.00	200	0.20

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
Emergency Generator	Diesel	1.00	1.00	50.0	500	0.73

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	32.8	annual days of extreme heat
Extreme Precipitation	0.00	annual days with precipitation above 20 mm

Sea Level Rise	—	meters of inundation depth
Wildfire	0.19	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A

Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	11.6
AQ-PM	19.1
AQ-DPM	9.09
Drinking Water	30.6
Lead Risk Housing	50.8
Pesticides	90.5
Toxic Releases	7.58
Traffic	3.06
Effect Indicators	—

CleanUp Sites	74.2
Groundwater	77.9
Haz Waste Facilities/Generators	93.2
Impaired Water Bodies	100.0
Solid Waste	86.5
Sensitive Population	—
Asthma	87.6
Cardio-vascular	83.2
Low Birth Weights	26.9
Socioeconomic Factor Indicators	—
Education	82.7
Housing	51.4
Linguistic	88.8
Poverty	94.9
Unemployment	99.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	16.66880534
Employed	7.173104068
Median HI	5.299627871
Education	—
Bachelor's or higher	5.017323239
High school enrollment	16.8741178
Preschool enrollment	68.89516233
Transportation	—

Auto Access	18.40112922
Active commuting	51.10997049
Social	—
2-parent households	13.28114975
Voting	16.79712563
Neighborhood	—
Alcohol availability	70.25535737
Park access	33.85089183
Retail density	4.311561658
Supermarket access	49.58295907
Tree canopy	0.782753753
Housing	—
Homeownership	38.3036058
Housing habitability	30.96368536
Low-inc homeowner severe housing cost burden	26.76761196
Low-inc renter severe housing cost burden	52.89362248
Uncrowded housing	38.58591043
Health Outcomes	—
Insured adults	21.00603105
Arthritis	0.0
Asthma ER Admissions	30.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	41.7

Cognitively Disabled	50.3
Physically Disabled	19.5
Heart Attack ER Admissions	46.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	54.3
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	14.1
Elderly	42.0
English Speaking	18.7
Foreign-born	65.3
Outdoor Workers	5.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	85.8
Traffic Density	4.9
Traffic Access	23.0
Other Indices	—
Hardship	92.9
Other Decision Support	—

2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	82.0
Healthy Places Index Score for Project Location (b)	11.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Land use data are based on applicant-provided buildout assumptions.
Operations: Landscape Equipment	Assumed 270 summer days for desert region.
Operations: Vehicle Data	Trip rates are based on ITE Land Use Code 140.
Operations: Road Dust	85% of roads assumed to be paved based on ICAPCD guidance and project narrative.
Operations: Off-Road Equipment	Assumed offroad equipment as part of project operations. Number of equipment based on SCAQMD Study (0.12 per KSF).
Operations: Water and Waste Water	Water data are based on applicant-provided calculations for the land use.

Lithium Valley Operation - Phase 1 - Battery Manufacturing Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Lithium Valley Operation - Phase 1 - Battery Manufacturing
Operational Year	2035
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	4.80
Location	33.18829759139308, -115.6026869228474
County	Imperial
City	Unincorporated
Air District	Imperial County APCD
Air Basin	Salton Sea
TAZ	5600
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Manufacturing	2,110	1000sqft	1,208	2,110,313	1,055,157	—	—	—
Parking Lot	10,552	1000sqft	242	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	142	134	95.0	984	2.60	3.27	37,443	37,446	3.15	3,760	3,763	3,183	342,424	345,607	339	14.5	861	359,253
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	116	109	103	580	2.29	3.11	37,443	37,446	3.03	3,760	3,763	3,183	311,642	314,825	339	14.9	557	328,294
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	111	105	72.2	546	1.71	2.50	25,619	25,622	2.42	2,573	2,575	3,183	247,444	250,627	337	11.8	643	263,207
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	20.2	19.1	13.2	99.6	0.31	0.46	4,675	4,676	0.44	470	470	527	40,967	41,494	55.7	1.96	106	43,577

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	65.8	59.9	69.0	871	2.47	1.35	37,443	37,444	1.27	3,760	3,761	—	251,352	251,352	4.97	9.01	312	254,474

Area	71.6	70.3	0.77	91.8	0.01	0.16	—	0.16	0.12	—	0.12	—	377	377	0.02	< 0.005	—	379
Energy	2.03	1.01	18.4	15.5	0.11	1.40	—	1.40	1.40	—	1.40	—	86,386	86,386	10.6	1.09	—	86,974
Water	—	—	—	—	—	—	—	—	—	—	—	1,773	3,049	4,822	182	4.37	—	10,680
Waste	—	—	—	—	—	—	—	—	—	—	—	1,410	0.00	1,410	141	0.00	—	4,934
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	549	549
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	2.70	2.46	6.88	6.28	0.01	0.36	0.00	0.36	0.36	0.00	0.36	0.00	1,259	1,259	0.05	0.01	0.00	1,263
Total	142	134	95.0	984	2.60	3.27	37,443	37,446	3.15	3,760	3,763	3,183	342,424	345,607	339	14.5	861	359,253
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	56.4	50.6	78.0	559	2.17	1.35	37,443	37,444	1.27	3,760	3,761	—	220,947	220,947	5.05	9.44	8.09	223,894
Area	55.2	55.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	2.03	1.01	18.4	15.5	0.11	1.40	—	1.40	1.40	—	1.40	—	86,386	86,386	10.6	1.09	—	86,974
Water	—	—	—	—	—	—	—	—	—	—	—	1,773	3,049	4,822	182	4.37	—	10,680
Waste	—	—	—	—	—	—	—	—	—	—	—	1,410	0.00	1,410	141	0.00	—	4,934
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	549	549
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	2.70	2.46	6.88	6.28	0.01	0.36	0.00	0.36	0.36	0.00	0.36	0.00	1,259	1,259	0.05	0.01	0.00	1,263
Total	116	109	103	580	2.29	3.11	37,443	37,446	3.03	3,760	3,763	3,183	311,642	314,825	339	14.9	557	328,294
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	41.0	37.0	52.2	462	1.59	0.93	25,619	25,620	0.88	2,573	2,574	—	161,838	161,838	3.43	6.43	93.4	163,933
Area	67.3	66.4	0.57	67.9	< 0.005	0.12	—	0.12	0.09	—	0.09	—	279	279	0.01	< 0.005	—	280
Energy	2.03	1.01	18.4	15.5	0.11	1.40	—	1.40	1.40	—	1.40	—	82,105	82,105	9.99	1.02	—	82,657
Water	—	—	—	—	—	—	—	—	—	—	—	1,773	3,049	4,822	182	4.37	—	10,680
Waste	—	—	—	—	—	—	—	—	—	—	—	1,410	0.00	1,410	141	0.00	—	4,934

Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	549	549
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	0.37	0.34	0.94	0.86	< 0.005	0.05	0.00	0.05	0.05	0.00	0.05	0.00	173	173	0.01	< 0.005	0.00	173
Total	111	105	72.2	546	1.71	2.50	25,619	25,622	2.42	2,573	2,575	3,183	247,444	250,627	337	11.8	643	263,207
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	7.48	6.74	9.53	84.2	0.29	0.17	4,675	4,676	0.16	470	470	—	26,794	26,794	0.57	1.06	15.5	27,141
Area	12.3	12.1	0.10	12.4	< 0.005	0.02	—	0.02	0.02	—	0.02	—	46.2	46.2	< 0.005	< 0.005	—	46.4
Energy	0.37	0.18	3.36	2.82	0.02	0.26	—	0.26	0.26	—	0.26	—	13,593	13,593	1.65	0.17	—	13,685
Water	—	—	—	—	—	—	—	—	—	—	—	294	505	798	30.2	0.72	—	1,768
Waste	—	—	—	—	—	—	—	—	—	—	—	233	0.00	233	23.3	0.00	—	817
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	90.9	90.9
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	0.07	0.06	0.17	0.16	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	28.6	28.6	< 0.005	< 0.005	0.00	28.7
Total	20.2	19.1	13.2	99.6	0.31	0.46	4,675	4,676	0.44	470	470	527	40,967	41,494	55.7	1.96	106	43,577

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Manufacturing	65.8	59.9	69.0	871	2.47	1.35	37,443	37,444	1.27	3,760	3,761	—	251,352	251,352	4.97	9.01	312	254,474
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	65.8	59.9	69.0	871	2.47	1.35	37,443	37,444	1.27	3,760	3,761	—	251,352	251,352	4.97	9.01	312	254,474
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	56.4	50.6	78.0	559	2.17	1.35	37,443	37,444	1.27	3,760	3,761	—	220,947	220,947	5.05	9.44	8.09	223,894
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	56.4	50.6	78.0	559	2.17	1.35	37,443	37,444	1.27	3,760	3,761	—	220,947	220,947	5.05	9.44	8.09	223,894
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	7.48	6.74	9.53	84.2	0.29	0.17	4,675	4,676	0.16	470	470	—	26,794	26,794	0.57	1.06	15.5	27,141
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	7.48	6.74	9.53	84.2	0.29	0.17	4,675	4,676	0.16	470	470	—	26,794	26,794	0.57	1.06	15.5	27,141

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	—	43,291	43,291	5.80	0.70	—	43,645
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	6,243	6,243	0.84	0.10	—	6,294

undefine	—	—	—	—	—	—	—	—	—	—	—	—	14,882	14,882	1.99	0.24	—	15,004
Total	—	—	—	—	—	—	—	—	—	—	—	—	64,416	64,416	8.62	1.05	—	64,943
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	—	43,291	43,291	5.80	0.70	—	43,645
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	6,243	6,243	0.84	0.10	—	6,294
undefined	—	—	—	—	—	—	—	—	—	—	—	—	14,882	14,882	1.99	0.24	—	15,004
Total	—	—	—	—	—	—	—	—	—	—	—	—	64,416	64,416	8.62	1.05	—	64,943
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	—	7,167	7,167	0.96	0.12	—	7,226
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	1,034	1,034	0.14	0.02	—	1,042
undefined	—	—	—	—	—	—	—	—	—	—	—	—	1,755	1,755	0.23	0.03	—	1,769
Total	—	—	—	—	—	—	—	—	—	—	—	—	9,956	9,956	1.33	0.16	—	10,037

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	2.03	1.01	18.4	15.5	0.11	1.40	—	1.40	1.40	—	1.40	—	21,970	21,970	1.94	0.04	—	22,031
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	2.03	1.01	18.4	15.5	0.11	1.40	—	1.40	1.40	—	1.40	—	21,970	21,970	1.94	0.04	—	22,031

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	2.03	1.01	18.4	15.5	0.11	1.40	—	1.40	1.40	—	1.40	—	21,970	21,970	1.94	0.04	—	22,031
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	2.03	1.01	18.4	15.5	0.11	1.40	—	1.40	1.40	—	1.40	—	21,970	21,970	1.94	0.04	—	22,031
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	0.37	0.18	3.36	2.82	0.02	0.26	—	0.26	0.26	—	0.26	—	3,637	3,637	0.32	0.01	—	3,647
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.37	0.18	3.36	2.82	0.02	0.26	—	0.26	0.26	—	0.26	—	3,637	3,637	0.32	0.01	—	3,647

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	46.0	46.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	9.25	9.25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	16.3	15.1	0.77	91.8	0.01	0.16	—	0.16	0.12	—	0.12	—	377	377	0.02	< 0.005	—	379

Total	71.6	70.3	0.77	91.8	0.01	0.16	—	0.16	0.12	—	0.12	—	377	377	0.02	< 0.005	—	379
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	46.0	46.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	9.25	9.25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	55.2	55.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	8.39	8.39	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	1.69	1.69	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	2.21	2.04	0.10	12.4	< 0.005	0.02	—	0.02	0.02	—	0.02	—	46.2	46.2	< 0.005	< 0.005	—	46.4
Total	12.3	12.1	0.10	12.4	< 0.005	0.02	—	0.02	0.02	—	0.02	—	46.2	46.2	< 0.005	< 0.005	—	46.4

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	1,773	3,049	4,822	182	4.37	—	10,680
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1,773	3,049	4,822	182	4.37	—	10,680
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	1,773	3,049	4,822	182	4.37	—	10,680
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1,773	3,049	4,822	182	4.37	—	10,680
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	294	505	798	30.2	0.72	—	1,768
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	294	505	798	30.2	0.72	—	1,768

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	1,410	0.00	1,410	141	0.00	—	4,934

Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1,410	0.00	1,410	141	0.00	—	4,934
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	1,410	0.00	1,410	141	0.00	—	4,934
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1,410	0.00	1,410	141	0.00	—	4,934
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	233	0.00	233	23.3	0.00	—	817
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	233	0.00	233	23.3	0.00	—	817

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	549	549
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	549	549
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Manufac	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	549	549
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	549	549
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	90.9	90.9
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	90.9	90.9

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	2.70	2.46	6.88	6.28	0.01	0.36	0.00	0.36	0.36	0.00	0.36	0.00	1,259	1,259	0.05	0.01	0.00	1,263
Total	2.70	2.46	6.88	6.28	0.01	0.36	0.00	0.36	0.36	0.00	0.36	0.00	1,259	1,259	0.05	0.01	0.00	1,263
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	2.70	2.46	6.88	6.28	0.01	0.36	0.00	0.36	0.36	0.00	0.36	0.00	1,259	1,259	0.05	0.01	0.00	1,263
Total	2.70	2.46	6.88	6.28	0.01	0.36	0.00	0.36	0.36	0.00	0.36	0.00	1,259	1,259	0.05	0.01	0.00	1,263
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.07	0.06	0.17	0.16	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	28.6	28.6	< 0.005	< 0.005	0.00	28.7
Total	0.07	0.06	0.17	0.16	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	28.6	28.6	< 0.005	< 0.005	0.00	28.7

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Manufacturing	10,024	16,376	12,978	4,144,022	204,176	333,559	264,354	84,408,541
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	3,165,470	1,055,157	633,094

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	270

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Manufacturing	64,099,546	247	0.0330	0.0040	68,552,680
Parking Lot	9,243,175	247	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Manufacturing	925,238,440	40,950,334
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Manufacturing	2,617	—
Parking Lot	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Manufacturing	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Forklifts	Electric	Average	253	8.00	200	0.20

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
Emergency Generator	Diesel	3.00	1.00	50.0	500	0.73

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	32.8	annual days of extreme heat
Extreme Precipitation	0.00	annual days with precipitation above 20 mm

Sea Level Rise	—	meters of inundation depth
Wildfire	0.19	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A

Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	11.6
AQ-PM	19.1
AQ-DPM	9.09
Drinking Water	30.6
Lead Risk Housing	50.8
Pesticides	90.5
Toxic Releases	7.58
Traffic	3.06
Effect Indicators	—

CleanUp Sites	74.2
Groundwater	77.9
Haz Waste Facilities/Generators	93.2
Impaired Water Bodies	100.0
Solid Waste	86.5
Sensitive Population	—
Asthma	87.6
Cardio-vascular	83.2
Low Birth Weights	26.9
Socioeconomic Factor Indicators	—
Education	82.7
Housing	51.4
Linguistic	88.8
Poverty	94.9
Unemployment	99.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	16.66880534
Employed	7.173104068
Median HI	5.299627871
Education	—
Bachelor's or higher	5.017323239
High school enrollment	16.8741178
Preschool enrollment	68.89516233
Transportation	—

Auto Access	18.40112922
Active commuting	51.10997049
Social	—
2-parent households	13.28114975
Voting	16.79712563
Neighborhood	—
Alcohol availability	70.25535737
Park access	33.85089183
Retail density	4.311561658
Supermarket access	49.58295907
Tree canopy	0.782753753
Housing	—
Homeownership	38.3036058
Housing habitability	30.96368536
Low-inc homeowner severe housing cost burden	26.76761196
Low-inc renter severe housing cost burden	52.89362248
Uncrowded housing	38.58591043
Health Outcomes	—
Insured adults	21.00603105
Arthritis	0.0
Asthma ER Admissions	30.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	41.7

Cognitively Disabled	50.3
Physically Disabled	19.5
Heart Attack ER Admissions	46.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	54.3
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	14.1
Elderly	42.0
English Speaking	18.7
Foreign-born	65.3
Outdoor Workers	5.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	85.8
Traffic Density	4.9
Traffic Access	23.0
Other Indices	—
Hardship	92.9
Other Decision Support	—

2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	82.0
Healthy Places Index Score for Project Location (b)	11.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Land use data are based on applicant-provided buildout assumptions.
Operations: Vehicle Data	Trip rates are based on ITE Land Use Code 140.
Operations: Landscape Equipment	Assumed 270 summer days for desert region.
Operations: Emergency Generators and Fire Pumps	Assumed 3 back-up generators each operating 1 hour/day and 50 hours/year for maintenance and testing.

Operations: Road Dust	All roads used by future developments projects within the Specific Plan Area would be required to be paved. Per ICAPCD guidance a value of 85% paved is assumed in the modeling to account for the high levels of entrained dust generated from vehicle travel on paved roadways in the region
Operations: Water and Waste Water	Water data are based on applicant-provided calculations for the land use.
Operations: Off-Road Equipment	Electric forklifts assumed as part of project operations.

Lithium Valley Operation - Phase 1 - BESS Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Lithium Valley Operation - Phase 1 - BESS
Operational Year	2035
Lead Agency	—
Land Use Scale	Plan/community
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	4.80
Location	33.18829759139308, -115.6026869228474
County	Imperial
City	Unincorporated
Air District	Imperial County APCD
Air Basin	Salton Sea
TAZ	5600
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
General Heavy Industry	945	1000sqft	884	945,311	189,062	—	—	—
Parking Lot	1,891	1000sqft	43.4	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	31.6	31.1	0.84	46.1	0.01	0.09	5.39	5.48	0.07	0.54	0.62	632	11,457	12,089	64.6	0.18	596	14,351
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	24.3	24.3	0.50	4.96	0.01	0.02	5.39	5.41	0.02	0.54	0.56	632	11,283	11,915	64.6	0.18	596	14,177
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	29.6	29.2	0.26	30.5	< 0.005	0.05	3.80	3.85	0.04	0.38	0.42	632	10,411	11,043	64.5	0.17	596	13,302
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	5.41	5.33	0.05	5.56	< 0.005	0.01	0.69	0.70	0.01	0.07	0.08	105	1,724	1,828	10.7	0.03	98.7	2,202

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.01	0.01	0.01	0.12	< 0.005	< 0.005	5.39	5.39	< 0.005	0.54	0.54	—	36.1	36.1	< 0.005	< 0.005	0.04	36.5

Area	31.5	31.0	0.35	41.1	< 0.005	0.07	—	0.07	0.06	—	0.06	—	169	169	0.01	< 0.005	—	170
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	9,242	9,242	1.24	0.15	—	9,317
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	1,020	1,020	0.14	0.02	—	1,028
Waste	—	—	—	—	—	—	—	—	—	—	—	632	0.00	632	63.1	0.00	—	2,210
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	596	596
Off-Road	0.09	0.09	0.49	4.88	0.01	0.02	—	0.02	0.02	—	0.02	—	990	990	0.04	0.01	—	994
Total	31.6	31.1	0.84	46.1	0.01	0.09	5.39	5.48	0.07	0.54	0.62	632	11,457	12,089	64.6	0.18	596	14,351
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.01	0.01	0.01	0.08	< 0.005	< 0.005	5.39	5.39	< 0.005	0.54	0.54	—	31.7	31.7	< 0.005	< 0.005	< 0.005	32.1
Area	24.2	24.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	9,242	9,242	1.24	0.15	—	9,317
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	1,020	1,020	0.14	0.02	—	1,028
Waste	—	—	—	—	—	—	—	—	—	—	—	632	0.00	632	63.1	0.00	—	2,210
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	596	596
Off-Road	0.09	0.09	0.49	4.88	0.01	0.02	—	0.02	0.02	—	0.02	—	990	990	0.04	0.01	—	994
Total	24.3	24.3	0.50	4.96	0.01	0.02	5.39	5.41	0.02	0.54	0.56	632	11,283	11,915	64.6	0.18	596	14,177
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.01	< 0.005	0.01	0.07	< 0.005	< 0.005	3.80	3.80	< 0.005	0.38	0.38	—	23.9	23.9	< 0.005	< 0.005	0.01	24.3
Area	29.6	29.2	0.26	30.4	< 0.005	0.05	—	0.05	0.04	—	0.04	—	125	125	0.01	< 0.005	—	126
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	9,242	9,242	1.24	0.15	—	9,317
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	1,020	1,020	0.14	0.02	—	1,028
Waste	—	—	—	—	—	—	—	—	—	—	—	632	0.00	632	63.1	0.00	—	2,210
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	596	596
Off-Road	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.90	0.90	< 0.005	< 0.005	—	0.90
Total	29.6	29.2	0.26	30.5	< 0.005	0.05	3.80	3.85	0.04	0.38	0.42	632	10,411	11,043	64.5	0.17	596	13,302

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	0.69	0.69	< 0.005	0.07	0.07	—	3.96	3.96	< 0.005	< 0.005	< 0.005	4.02
Area	5.40	5.33	0.05	5.55	< 0.005	0.01	—	0.01	0.01	—	0.01	—	20.7	20.7	< 0.005	< 0.005	—	20.8
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	1,530	1,530	0.20	0.02	—	1,543
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	169	169	0.02	< 0.005	—	170
Waste	—	—	—	—	—	—	—	—	—	—	—	105	0.00	105	10.5	0.00	—	366
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	98.7	98.7
Off-Road	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.15	0.15	< 0.005	< 0.005	—	0.15
Total	5.41	5.33	0.05	5.56	< 0.005	0.01	0.69	0.70	0.01	0.07	0.08	105	1,724	1,828	10.7	0.03	98.7	2,202

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Mobile source emissions results are presented in Sections 2.6. No further detailed breakdown of emissions is available.

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	7,888	7,888	1.06	0.13	—	7,953
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	1,353	1,353	0.18	0.02	—	1,364

Total	—	—	—	—	—	—	—	—	—	—	—	—	9,242	9,242	1.24	0.15	—	9,317
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	7,888	7,888	1.06	0.13	—	7,953
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	1,353	1,353	0.18	0.02	—	1,364
Total	—	—	—	—	—	—	—	—	—	—	—	—	9,242	9,242	1.24	0.15	—	9,317
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	1,306	1,306	0.17	0.02	—	1,317
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	224	224	0.03	< 0.005	—	226
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,530	1,530	0.20	0.02	—	1,543

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	20.4	20.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	3.82	3.82	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	7.32	6.76	0.35	41.1	< 0.005	0.07	—	0.07	0.06	—	0.06	—	169	169	0.01	< 0.005	—	170
Total	31.5	31.0	0.35	41.1	< 0.005	0.07	—	0.07	0.06	—	0.06	—	169	169	0.01	< 0.005	—	170

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	20.4	20.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	3.82	3.82	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	24.2	24.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	3.72	3.72	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.70	0.70	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.99	0.91	0.05	5.55	< 0.005	0.01	—	0.01	0.01	—	0.01	—	20.7	20.7	< 0.005	< 0.005	—	20.8
Total	5.40	5.33	0.05	5.55	< 0.005	0.01	—	0.01	0.01	—	0.01	—	20.7	20.7	< 0.005	< 0.005	—	20.8

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	0.00	1,020	1,020	0.14	0.02	—	1,028
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	1,020	1,020	0.14	0.02	—	1,028
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	0.00	1,020	1,020	0.14	0.02	—	1,028
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	1,020	1,020	0.14	0.02	—	1,028
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	0.00	169	169	0.02	< 0.005	—	170
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	169	169	0.02	< 0.005	—	170

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	632	0.00	632	63.1	0.00	—	2,210
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	632	0.00	632	63.1	0.00	—	2,210
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	632	0.00	632	63.1	0.00	—	2,210
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	632	0.00	632	63.1	0.00	—	2,210
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	105	0.00	105	10.5	0.00	—	366
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	105	0.00	105	10.5	0.00	—	366

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	596	596
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	596	596
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	596	596
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	596	596
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	98.7	98.7
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	98.7	98.7

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cranes	0.09	0.09	0.49	4.88	0.01	0.02	—	0.02	0.02	—	0.02	—	990	990	0.04	0.01	—	994
Total	0.09	0.09	0.49	4.88	0.01	0.02	—	0.02	0.02	—	0.02	—	990	990	0.04	0.01	—	994
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cranes	0.09	0.09	0.49	4.88	0.01	0.02	—	0.02	0.02	—	0.02	—	990	990	0.04	0.01	—	994
Total	0.09	0.09	0.49	4.88	0.01	0.02	—	0.02	0.02	—	0.02	—	990	990	0.04	0.01	—	994

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cranes	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.15	0.15	< 0.005	< 0.005	—	0.15
Total	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.15	0.15	< 0.005	< 0.005	—	0.15

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Remove	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Total all Land Uses	2.00	0.00	0.00	521	48.0	0.00	0.00	12,514

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	1,417,967	472,656	113,437

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	270

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
General Heavy Industry	11,680,000	247	0.0330	0.0040	0.00
Parking Lot	2,003,885	247	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
General Heavy Industry	0.00	469,150,401
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)

General Heavy Industry	1,172	—
Parking Lot	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
General Heavy Industry	User Defined	User Defined	23,900	0.40	0.50	0.50	30.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Cranes	Diesel	Tier 4 Final	1.00	8.00	367	0.29

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
Emergency Generator	Diesel	1.00	1.00	50.0	500	0.73

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	32.8	annual days of extreme heat
Extreme Precipitation	0.00	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.19	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A

Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	11.6
AQ-PM	19.1
AQ-DPM	9.09
Drinking Water	30.6
Lead Risk Housing	50.8
Pesticides	90.5
Toxic Releases	7.58
Traffic	3.06
Effect Indicators	—
CleanUp Sites	74.2
Groundwater	77.9

Haz Waste Facilities/Generators	93.2
Impaired Water Bodies	100.0
Solid Waste	86.5
Sensitive Population	—
Asthma	87.6
Cardio-vascular	83.2
Low Birth Weights	26.9
Socioeconomic Factor Indicators	—
Education	82.7
Housing	51.4
Linguistic	88.8
Poverty	94.9
Unemployment	99.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	16.66880534
Employed	7.173104068
Median HI	5.299627871
Education	—
Bachelor's or higher	5.017323239
High school enrollment	16.8741178
Preschool enrollment	68.89516233
Transportation	—
Auto Access	18.40112922
Active commuting	51.10997049

Social	—
2-parent households	13.28114975
Voting	16.79712563
Neighborhood	—
Alcohol availability	70.25535737
Park access	33.85089183
Retail density	4.311561658
Supermarket access	49.58295907
Tree canopy	0.782753753
Housing	—
Homeownership	38.3036058
Housing habitability	30.96368536
Low-inc homeowner severe housing cost burden	26.76761196
Low-inc renter severe housing cost burden	52.89362248
Uncrowded housing	38.58591043
Health Outcomes	—
Insured adults	21.00603105
Arthritis	0.0
Asthma ER Admissions	30.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	41.7
Cognitively Disabled	50.3
Physically Disabled	19.5

Heart Attack ER Admissions	46.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	54.3
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	14.1
Elderly	42.0
English Speaking	18.7
Foreign-born	65.3
Outdoor Workers	5.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	85.8
Traffic Density	4.9
Traffic Access	23.0
Other Indices	—
Hardship	92.9
Other Decision Support	—
2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	82.0
Healthy Places Index Score for Project Location (b)	11.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Land use data are based on applicant-provided buildout assumptions.
Operations: Energy Use	No natural gas. 11,680,000 kWh/year based on auxiliary energy consumption (2%) calculated based on an assumed 400 MW capacity, operating 4 hours/day and 365 days/year.
Operations: Water and Waste Water	Water data are based on applicant-provided calculations for the land use. No indoor water required for operations.
Operations: Off-Road Equipment	Project operations anticipated to require periodic maintenance that requires cranes to move battery units around every 3 years.
Operations: Refrigerants	Assumed 1,000 pounds of SF6 as part of project operations for breakers/inverters.
Operations: Landscape Equipment	Assumed 270 summer days for desert region.

Operations: Emergency Generators and Fire Pumps	Assumed 1 back-up generator operating 1 hour/day and 50 hours/year as part of project operations.
Operations: Road Dust	85% of roads assumed to be paved based on ICAPCD guidance and project narrative.

Lithium Valley Operation - Phase 1 - Business Industrial Parks Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Lithium Valley Operation - Phase 1 - Business Industrial Parks
Operational Year	2035
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	4.80
Location	33.18829759139308, -115.6026869228474
County	Imperial
City	Unincorporated
Air District	Imperial County APCD
Air Basin	Salton Sea
TAZ	5600
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Industrial Park	588	1000sqft	268	588,484	294,242	—	—	—
Parking Lot	2,942	1000sqft	67.5	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	29.0	27.8	12.6	135	0.31	0.46	4,534	4,535	0.44	455	456	469	54,149	54,618	50.7	1.63	191	56,561
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	23.3	22.4	13.4	71.2	0.28	0.41	4,534	4,535	0.40	455	456	469	50,361	50,830	50.7	1.68	154	52,752
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	25.3	24.4	10.1	91.1	0.25	0.32	3,914	3,914	0.31	393	393	469	46,840	47,309	50.4	1.50	167	49,183
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.63	4.45	1.85	16.6	0.05	0.06	714	714	0.06	71.7	71.8	77.6	7,755	7,833	8.35	0.25	27.7	8,143

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	7.97	7.25	8.35	105	0.30	0.16	4,534	4,535	0.15	455	455	—	30,440	30,440	0.60	1.09	37.8	30,818

Area	20.0	19.6	0.22	25.6	< 0.005	0.05	—	0.05	0.03	—	0.03	—	105	105	< 0.005	< 0.005	—	106
Energy	0.19	0.09	1.69	1.42	0.01	0.13	—	0.13	0.13	—	0.13	—	23,054	23,054	2.99	0.35	—	23,232
Water	—	—	—	—	—	—	—	—	—	—	—	75.6	130	206	7.77	0.19	—	456
Waste	—	—	—	—	—	—	—	—	—	—	—	393	0.00	393	39.3	0.00	—	1,376
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	153	153
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	0.90	0.82	2.29	2.09	< 0.005	0.12	0.00	0.12	0.12	0.00	0.12	0.00	420	420	0.02	< 0.005	0.00	421
Total	29.0	27.8	12.6	135	0.31	0.46	4,534	4,535	0.44	455	456	469	54,149	54,618	50.7	1.63	191	56,561
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	6.83	6.13	9.45	67.6	0.26	0.16	4,534	4,535	0.15	455	455	—	26,757	26,757	0.61	1.14	0.98	27,114
Area	15.4	15.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.19	0.09	1.69	1.42	0.01	0.13	—	0.13	0.13	—	0.13	—	23,054	23,054	2.99	0.35	—	23,232
Water	—	—	—	—	—	—	—	—	—	—	—	75.6	130	206	7.77	0.19	—	456
Waste	—	—	—	—	—	—	—	—	—	—	—	393	0.00	393	39.3	0.00	—	1,376
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	153	153
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	0.90	0.82	2.29	2.09	< 0.005	0.12	0.00	0.12	0.12	0.00	0.12	0.00	420	420	0.02	< 0.005	0.00	421
Total	23.3	22.4	13.4	71.2	0.28	0.41	4,534	4,535	0.40	455	456	469	50,361	50,830	50.7	1.68	154	52,752
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	6.26	5.64	7.98	70.5	0.24	0.14	3,914	3,914	0.13	393	393	—	24,722	24,722	0.52	0.98	14.3	25,042
Area	18.8	18.5	0.16	18.9	< 0.005	0.03	—	0.03	0.03	—	0.03	—	77.9	77.9	< 0.005	< 0.005	—	78.1
Energy	0.19	0.09	1.69	1.42	0.01	0.13	—	0.13	0.13	—	0.13	—	21,853	21,853	2.83	0.33	—	22,021
Water	—	—	—	—	—	—	—	—	—	—	—	75.6	130	206	7.77	0.19	—	456
Waste	—	—	—	—	—	—	—	—	—	—	—	393	0.00	393	39.3	0.00	—	1,376

Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	153	153
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	0.12	0.11	0.31	0.29	< 0.005	0.02	0.00	0.02	0.02	0.00	0.02	0.00	57.5	57.5	< 0.005	< 0.005	0.00	57.7
Total	25.3	24.4	10.1	91.1	0.25	0.32	3,914	3,914	0.31	393	393	469	46,840	47,309	50.4	1.50	167	49,183
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.14	1.03	1.46	12.9	0.04	0.03	714	714	0.02	71.7	71.7	—	4,093	4,093	0.09	0.16	2.36	4,146
Area	3.43	3.38	0.03	3.46	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	12.9	12.9	< 0.005	< 0.005	—	12.9
Energy	0.03	0.02	0.31	0.26	< 0.005	0.02	—	0.02	0.02	—	0.02	—	3,618	3,618	0.47	0.05	—	3,646
Water	—	—	—	—	—	—	—	—	—	—	—	12.5	21.5	34.1	1.29	0.03	—	75.4
Waste	—	—	—	—	—	—	—	—	—	—	—	65.1	0.00	65.1	6.51	0.00	—	228
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	25.4	25.4
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	0.02	0.02	0.06	0.05	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	9.52	9.52	< 0.005	< 0.005	0.00	9.55
Total	4.63	4.45	1.85	16.6	0.05	0.06	714	714	0.06	71.7	71.8	77.6	7,755	7,833	8.35	0.25	27.7	8,143

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Industrial	7.97	7.25	8.35	105	0.30	0.16	4,534	4,535	0.15	455	455	—	30,440	30,440	0.60	1.09	37.8	30,818
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	7.97	7.25	8.35	105	0.30	0.16	4,534	4,535	0.15	455	455	—	30,440	30,440	0.60	1.09	37.8	30,818
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	6.83	6.13	9.45	67.6	0.26	0.16	4,534	4,535	0.15	455	455	—	26,757	26,757	0.61	1.14	0.98	27,114
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	6.83	6.13	9.45	67.6	0.26	0.16	4,534	4,535	0.15	455	455	—	26,757	26,757	0.61	1.14	0.98	27,114
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	1.14	1.03	1.46	12.9	0.04	0.03	714	714	0.02	71.7	71.7	—	4,093	4,093	0.09	0.16	2.36	4,146
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	1.14	1.03	1.46	12.9	0.04	0.03	714	714	0.02	71.7	71.7	—	4,093	4,093	0.09	0.16	2.36	4,146

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	15,116	15,116	2.02	0.25	—	15,239

Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	1,741	1,741	0.23	0.03	—	1,755
undefined	—	—	—	—	—	—	—	—	—	—	—	—	4,176	4,176	0.56	0.07	—	4,211
Total	—	—	—	—	—	—	—	—	—	—	—	—	21,033	21,033	2.82	0.34	—	21,205
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	15,116	15,116	2.02	0.25	—	15,239
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	1,741	1,741	0.23	0.03	—	1,755
undefined	—	—	—	—	—	—	—	—	—	—	—	—	4,176	4,176	0.56	0.07	—	4,211
Total	—	—	—	—	—	—	—	—	—	—	—	—	21,033	21,033	2.82	0.34	—	21,205
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	2,503	2,503	0.34	0.04	—	2,523
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	288	288	0.04	< 0.005	—	291
undefined	—	—	—	—	—	—	—	—	—	—	—	—	493	493	0.07	0.01	—	497
Total	—	—	—	—	—	—	—	—	—	—	—	—	3,283	3,283	0.44	0.05	—	3,310

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Industrial	0.19	0.09	1.69	1.42	0.01	0.13	—	0.13	0.13	—	0.13	—	2,021	2,021	0.18	< 0.005	—	2,027
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.19	0.09	1.69	1.42	0.01	0.13	—	0.13	0.13	—	0.13	—	2,021	2,021	0.18	< 0.005	—	2,027
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	0.19	0.09	1.69	1.42	0.01	0.13	—	0.13	0.13	—	0.13	—	2,021	2,021	0.18	< 0.005	—	2,027
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.19	0.09	1.69	1.42	0.01	0.13	—	0.13	0.13	—	0.13	—	2,021	2,021	0.18	< 0.005	—	2,027
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	0.03	0.02	0.31	0.26	< 0.005	0.02	—	0.02	0.02	—	0.02	—	335	335	0.03	< 0.005	—	336
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.03	0.02	0.31	0.26	< 0.005	0.02	—	0.02	0.02	—	0.02	—	335	335	0.03	< 0.005	—	336

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	12.8	12.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architect Coatings	2.58	2.58	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	4.56	4.21	0.22	25.6	< 0.005	0.05	—	0.05	0.03	—	0.03	—	105	105	< 0.005	< 0.005	—	106
Total	20.0	19.6	0.22	25.6	< 0.005	0.05	—	0.05	0.03	—	0.03	—	105	105	< 0.005	< 0.005	—	106
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	12.8	12.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	2.58	2.58	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	15.4	15.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	2.34	2.34	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.47	0.47	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.62	0.57	0.03	3.46	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	12.9	12.9	< 0.005	< 0.005	—	12.9
Total	3.43	3.38	0.03	3.46	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	12.9	12.9	< 0.005	< 0.005	—	12.9

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	75.6	130	206	7.77	0.19	—	456
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	75.6	130	206	7.77	0.19	—	456
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	75.6	130	206	7.77	0.19	—	456
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	75.6	130	206	7.77	0.19	—	456
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	12.5	21.5	34.1	1.29	0.03	—	75.4
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	12.5	21.5	34.1	1.29	0.03	—	75.4

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	393	0.00	393	39.3	0.00	—	1,376
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	393	0.00	393	39.3	0.00	—	1,376
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	393	0.00	393	39.3	0.00	—	1,376
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	393	0.00	393	39.3	0.00	—	1,376
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	65.1	0.00	65.1	6.51	0.00	—	228
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	65.1	0.00	65.1	6.51	0.00	—	228

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	153	153
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	153	153
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	153	153
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	153	153
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	25.4	25.4
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	25.4	25.4

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.90	0.82	2.29	2.09	< 0.005	0.12	0.00	0.12	0.12	0.00	0.12	0.00	420	420	0.02	< 0.005	0.00	421
Total	0.90	0.82	2.29	2.09	< 0.005	0.12	0.00	0.12	0.12	0.00	0.12	0.00	420	420	0.02	< 0.005	0.00	421
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.90	0.82	2.29	2.09	< 0.005	0.12	0.00	0.12	0.12	0.00	0.12	0.00	420	420	0.02	< 0.005	0.00	421
Total	0.90	0.82	2.29	2.09	< 0.005	0.12	0.00	0.12	0.12	0.00	0.12	0.00	420	420	0.02	< 0.005	0.00	421
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Emergency	0.02	0.02	0.06	0.05	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	9.52	9.52	< 0.005	< 0.005	0.00	9.55
Total	0.02	0.02	0.06	0.05	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	9.52	9.52	< 0.005	< 0.005	0.00	9.55

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Industrial Park	1,983	1,495	730	633,037	40,395	30,446	14,863	12,894,163
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	882,726	294,242	176,545

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	270

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Industrial Park	22,381,495	247	0.0330	0.0040	6,306,440

Parking Lot	2,577,560	247	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Industrial Park	39,473,809	1,747,080
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Industrial Park	730	—
Parking Lot	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Industrial Park	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Forklifts	Electric	Average	71.0	8.00	200	0.20

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
Emergency Generator	Diesel	1.00	1.00	50.0	500	0.73

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	32.8	annual days of extreme heat
Extreme Precipitation	0.00	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.19	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A

Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	11.6
AQ-PM	19.1
AQ-DPM	9.09
Drinking Water	30.6
Lead Risk Housing	50.8
Pesticides	90.5
Toxic Releases	7.58
Traffic	3.06
Effect Indicators	—
CleanUp Sites	74.2
Groundwater	77.9
Haz Waste Facilities/Generators	93.2
Impaired Water Bodies	100.0
Solid Waste	86.5
Sensitive Population	—
Asthma	87.6
Cardio-vascular	83.2
Low Birth Weights	26.9
Socioeconomic Factor Indicators	—
Education	82.7
Housing	51.4
Linguistic	88.8
Poverty	94.9
Unemployment	99.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	16.66880534
Employed	7.173104068
Median HI	5.299627871
Education	—
Bachelor's or higher	5.017323239
High school enrollment	16.8741178
Preschool enrollment	68.89516233
Transportation	—
Auto Access	18.40112922
Active commuting	51.10997049
Social	—
2-parent households	13.28114975
Voting	16.79712563
Neighborhood	—
Alcohol availability	70.25535737
Park access	33.85089183
Retail density	4.311561658
Supermarket access	49.58295907
Tree canopy	0.782753753
Housing	—
Homeownership	38.3036058
Housing habitability	30.96368536
Low-inc homeowner severe housing cost burden	26.76761196
Low-inc renter severe housing cost burden	52.89362248
Uncrowded housing	38.58591043
Health Outcomes	—

Insured adults	21.00603105
Arthritis	0.0
Asthma ER Admissions	30.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	41.7
Cognitively Disabled	50.3
Physically Disabled	19.5
Heart Attack ER Admissions	46.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	54.3
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	14.1
Elderly	42.0

English Speaking	18.7
Foreign-born	65.3
Outdoor Workers	5.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	85.8
Traffic Density	4.9
Traffic Access	23.0
Other Indices	—
Hardship	92.9
Other Decision Support	—
2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	82.0
Healthy Places Index Score for Project Location (b)	11.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Land use data are based on applicant-provided buildout assumptions.
Operations: Vehicle Data	Trip rates are based on ITE Land Use Code 130.
Operations: Landscape Equipment	Assumed 270 summer days for desert region.
Operations: Off-Road Equipment	Assumed offroad equipment as part of project operations.
Operations: Road Dust	All roads used by future developments projects within the Specific Plan Area would be required to be paved. Per ICAPCD guidance a value of 85% paved is assumed in the modeling to account for the high levels of entrained dust generated from vehicle travel on paved roadways in the region
Operations: Water and Waste Water	Water data are based on applicant-provided calculations for the land use.

Lithium Valley Operation - Phase 1 - Commercial Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Lithium Valley Operation - Phase 1 - Commercial
Operational Year	2035
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	4.80
Location	33.18829759139308, -115.6026869228474
County	Imperial
City	Unincorporated
Air District	Imperial County APCD
Air Basin	Salton Sea
TAZ	5600
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Regional Shopping Center	247	1000sqft	354	247,411	123,705	—	—	—
Parking Lot	1,237	1000sqft	28.4	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	101	95.5	68.8	780	2.00	1.17	29,863	29,864	1.10	2,999	3,000	169	207,116	207,285	22.8	8.36	250	210,596
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	83.9	78.5	76.4	530	1.76	1.15	29,863	29,864	1.09	2,999	3,000	169	182,863	183,031	23.2	8.67	7.64	186,202
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	71.5	67.4	55.4	458	1.36	0.87	21,526	21,527	0.82	2,162	2,162	169	142,191	142,360	21.6	6.36	79.7	144,874
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	13.1	12.3	10.1	83.5	0.25	0.16	3,929	3,929	0.15	395	395	28.0	23,541	23,569	3.57	1.05	13.2	23,986

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	92.7	87.3	68.2	769	2.00	1.12	29,863	29,864	1.05	2,999	3,000	—	203,285	203,285	5.36	8.23	249	206,121

Area	8.39	8.24	0.09	10.8	< 0.005	0.02	—	0.02	0.01	—	0.01	—	44.2	44.2	< 0.005	< 0.005	—	44.4
Energy	0.05	0.02	0.45	0.37	< 0.005	0.03	—	0.03	0.03	—	0.03	—	3,734	3,734	0.48	0.05	—	3,762
Water	—	—	—	—	—	—	—	—	—	—	—	28.9	52.8	81.8	2.97	0.07	—	177
Waste	—	—	—	—	—	—	—	—	—	—	—	140	0.00	140	14.0	0.00	—	490
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.19	1.19
Total	101	95.5	68.8	780	2.00	1.17	29,863	29,864	1.10	2,999	3,000	169	207,116	207,285	22.8	8.36	250	210,596
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	77.4	72.0	75.9	529	1.76	1.12	29,863	29,864	1.05	2,999	3,000	—	179,075	179,075	5.72	8.55	6.45	181,771
Area	6.48	6.48	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.05	0.02	0.45	0.37	< 0.005	0.03	—	0.03	0.03	—	0.03	—	3,734	3,734	0.48	0.05	—	3,762
Water	—	—	—	—	—	—	—	—	—	—	—	28.9	52.8	81.8	2.97	0.07	—	177
Waste	—	—	—	—	—	—	—	—	—	—	—	140	0.00	140	14.0	0.00	—	490
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.19	1.19
Total	83.9	78.5	76.4	530	1.76	1.15	29,863	29,864	1.09	2,999	3,000	169	182,863	183,031	23.2	8.67	7.64	186,202
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	63.6	59.6	54.9	449	1.36	0.82	21,526	21,527	0.77	2,162	2,162	—	138,371	138,371	4.13	6.24	78.5	140,411
Area	7.89	7.78	0.07	7.96	< 0.005	0.01	—	0.01	0.01	—	0.01	—	32.7	32.7	< 0.005	< 0.005	—	32.8
Energy	0.05	0.02	0.45	0.37	< 0.005	0.03	—	0.03	0.03	—	0.03	—	3,734	3,734	0.48	0.05	—	3,762
Water	—	—	—	—	—	—	—	—	—	—	—	28.9	52.8	81.8	2.97	0.07	—	177
Waste	—	—	—	—	—	—	—	—	—	—	—	140	0.00	140	14.0	0.00	—	490
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.19	1.19
Total	71.5	67.4	55.4	458	1.36	0.87	21,526	21,527	0.82	2,162	2,162	169	142,191	142,360	21.6	6.36	79.7	144,874
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	11.6	10.9	10.0	82.0	0.25	0.15	3,929	3,929	0.14	395	395	—	22,909	22,909	0.68	1.03	13.0	23,247
Area	1.44	1.42	0.01	1.45	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.42	5.42	< 0.005	< 0.005	—	5.44
Energy	0.01	< 0.005	0.08	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	618	618	0.08	0.01	—	623

Water	—	—	—	—	—	—	—	—	—	—	—	4.79	8.75	13.5	0.49	0.01	—	29.4
Waste	—	—	—	—	—	—	—	—	—	—	—	23.2	0.00	23.2	2.32	0.00	—	81.1
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.20	0.20
Total	13.1	12.3	10.1	83.5	0.25	0.16	3,929	3,929	0.15	395	395	28.0	23,541	23,569	3.57	1.05	13.2	23,986

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	92.7	87.3	68.2	769	2.00	1.12	29,863	29,864	1.05	2,999	3,000	—	203,285	203,285	5.36	8.23	249	206,121
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	92.7	87.3	68.2	769	2.00	1.12	29,863	29,864	1.05	2,999	3,000	—	203,285	203,285	5.36	8.23	249	206,121
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	77.4	72.0	75.9	529	1.76	1.12	29,863	29,864	1.05	2,999	3,000	—	179,075	179,075	5.72	8.55	6.45	181,771
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Total	77.4	72.0	75.9	529	1.76	1.12	29,863	29,864	1.05	2,999	3,000	—	179,075	179,075	5.72	8.55	6.45	181,771
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	11.6	10.9	10.0	82.0	0.25	0.15	3,929	3,929	0.14	395	395	—	22,909	22,909	0.68	1.03	13.0	23,247
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	11.6	10.9	10.0	82.0	0.25	0.15	3,929	3,929	0.14	395	395	—	22,909	22,909	0.68	1.03	13.0	23,247

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	2,470	2,470	0.33	0.04	—	2,491
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	732	732	0.10	0.01	—	738
Total	—	—	—	—	—	—	—	—	—	—	—	—	3,202	3,202	0.43	0.05	—	3,228
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	2,470	2,470	0.33	0.04	—	2,491
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	732	732	0.10	0.01	—	738
Total	—	—	—	—	—	—	—	—	—	—	—	—	3,202	3,202	0.43	0.05	—	3,228
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	409	409	0.05	0.01	—	412
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	121	121	0.02	< 0.005	—	122
Total	—	—	—	—	—	—	—	—	—	—	—	—	530	530	0.07	0.01	—	535

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	0.05	0.02	0.45	0.37	< 0.005	0.03	—	0.03	0.03	—	0.03	—	532	532	0.05	< 0.005	—	534
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.05	0.02	0.45	0.37	< 0.005	0.03	—	0.03	0.03	—	0.03	—	532	532	0.05	< 0.005	—	534
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Regiona Shopping Center	0.05	0.02	0.45	0.37	< 0.005	0.03	—	0.03	0.03	—	0.03	—	532	532	0.05	< 0.005	—	534
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.05	0.02	0.45	0.37	< 0.005	0.03	—	0.03	0.03	—	0.03	—	532	532	0.05	< 0.005	—	534
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	0.01	< 0.005	0.08	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	88.1	88.1	0.01	< 0.005	—	88.4
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.01	< 0.005	0.08	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	88.1	88.1	0.01	< 0.005	—	88.4

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	5.39	5.39	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	1.08	1.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Landscape Equipment	1.92	1.77	0.09	10.8	< 0.005	0.02	—	0.02	0.01	—	0.01	—	44.2	44.2	< 0.005	< 0.005	—	44.4
Total	8.39	8.24	0.09	10.8	< 0.005	0.02	—	0.02	0.01	—	0.01	—	44.2	44.2	< 0.005	< 0.005	—	44.4
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	5.39	5.39	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	1.08	1.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	6.48	6.48	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.98	0.98	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.20	0.20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.26	0.24	0.01	1.45	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.42	5.42	< 0.005	< 0.005	—	5.44
Total	1.44	1.42	0.01	1.45	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.42	5.42	< 0.005	< 0.005	—	5.44

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	28.9	52.8	81.8	2.97	0.07	—	177
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	28.9	52.8	81.8	2.97	0.07	—	177
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	28.9	52.8	81.8	2.97	0.07	—	177
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	28.9	52.8	81.8	2.97	0.07	—	177
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	4.79	8.75	13.5	0.49	0.01	—	29.4
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	4.79	8.75	13.5	0.49	0.01	—	29.4

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	140	0.00	140	14.0	0.00	—	490
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	140	0.00	140	14.0	0.00	—	490
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	140	0.00	140	14.0	0.00	—	490
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	140	0.00	140	14.0	0.00	—	490
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	23.2	0.00	23.2	2.32	0.00	—	81.1
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	23.2	0.00	23.2	2.32	0.00	—	81.1

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.19	1.19
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.19	1.19
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.19	1.19
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.19	1.19
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.20	0.20
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.20	0.20

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Regional Shopping Center	23,378	28,561	13,066	8,265,455	194,490	266,033	121,701	70,923,830
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	371,116	123,705	74,226

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	270

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Regional Shopping Center	3,657,735	247	0.0330	0.0040	1,660,810
Parking Lot	1,083,703	247	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Regional Shopping Center	15,096,986	2,086,027
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Regional Shopping Center	260	—
Parking Lot	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Regional Shopping Center	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Regional Shopping Center	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	32.8	annual days of extreme heat
Extreme Precipitation	0.00	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.19	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	11.6

AQ-PM	19.1
AQ-DPM	9.09
Drinking Water	30.6
Lead Risk Housing	50.8
Pesticides	90.5
Toxic Releases	7.58
Traffic	3.06
Effect Indicators	—
CleanUp Sites	74.2
Groundwater	77.9
Haz Waste Facilities/Generators	93.2
Impaired Water Bodies	100.0
Solid Waste	86.5
Sensitive Population	—
Asthma	87.6
Cardio-vascular	83.2
Low Birth Weights	26.9
Socioeconomic Factor Indicators	—
Education	82.7
Housing	51.4
Linguistic	88.8
Poverty	94.9
Unemployment	99.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—

Above Poverty	16.66880534
Employed	7.173104068
Median HI	5.299627871
Education	—
Bachelor's or higher	5.017323239
High school enrollment	16.8741178
Preschool enrollment	68.89516233
Transportation	—
Auto Access	18.40112922
Active commuting	51.10997049
Social	—
2-parent households	13.28114975
Voting	16.79712563
Neighborhood	—
Alcohol availability	70.25535737
Park access	33.85089183
Retail density	4.311561658
Supermarket access	49.58295907
Tree canopy	0.782753753
Housing	—
Homeownership	38.3036058
Housing habitability	30.96368536
Low-inc homeowner severe housing cost burden	26.76761196
Low-inc renter severe housing cost burden	52.89362248
Uncrowded housing	38.58591043
Health Outcomes	—
Insured adults	21.00603105
Arthritis	0.0

Asthma ER Admissions	30.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	41.7
Cognitively Disabled	50.3
Physically Disabled	19.5
Heart Attack ER Admissions	46.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	54.3
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	14.1
Elderly	42.0
English Speaking	18.7
Foreign-born	65.3

Outdoor Workers	5.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	85.8
Traffic Density	4.9
Traffic Access	23.0
Other Indices	—
Hardship	92.9
Other Decision Support	—
2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	82.0
Healthy Places Index Score for Project Location (b)	11.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Land use data are based on applicant-provided buildout assumptions.
Operations: Landscape Equipment	Assumed 270 summer days for desert region.
Operations: Water and Waste Water	Water calculation based on applicant-provided figures.
Operations: Vehicle Data	Trip rates changed based on suggested ITE trip rates.
Operations: Road Dust	85% of roads assumed to be paved based on ICAPCD guidance and project narrative.

Lithium Valley Operation - Phase 1 - Data Centers Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Lithium Valley Operation - Phase 1 - Data Centers
Operational Year	2035
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	4.80
Location	33.18829759139308, -115.6026869228474
County	Imperial
City	Unincorporated
Air District	Imperial County APCD
Air Basin	Salton Sea
TAZ	5600
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
General Heavy Industry	2,199	1000sqft	731	2,198,961	1,099,480	—	—	—
Parking Lot	10,995	1000sqft	252	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1,005	920	3,744	2,411	4.55	123	8,145	8,268	123	818	941	2,612	3,091,923	3,094,536	632	50.4	640	3,126,002
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	986	902	3,745	2,247	4.48	123	8,145	8,268	123	818	941	2,612	3,084,916	3,087,528	632	50.5	574	3,118,955
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	205	191	523	462	0.90	17.1	5,564	5,582	17.1	559	576	2,612	2,704,243	2,706,855	617	47.0	593	2,736,868
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	37.3	34.9	95.4	84.3	0.16	3.13	1,016	1,019	3.12	102	105	432	447,718	448,151	102	7.78	98.1	453,120

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	14.3	13.0	15.0	189	0.54	0.29	8,145	8,145	0.28	818	818	—	54,677	54,677	1.08	1.96	67.9	55,356
Area	74.6	73.3	0.80	95.6	0.01	0.17	—	0.17	0.13	—	0.13	—	393	393	0.02	< 0.005	—	395
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	2,608,414	2,608,414	349	42.3	—	2,629,757
Water	—	—	—	—	—	—	—	—	—	—	—	1,143	1,965	3,108	117	2.82	—	6,883
Waste	—	—	—	—	—	—	—	—	—	—	—	1,470	0.00	1,470	147	0.00	—	5,141
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	572	572
Stationary	916	834	3,728	2,126	4.01	123	0.00	123	123	0.00	123	0.00	426,473	426,473	17.1	3.34	0.00	427,897
Total	1,005	920	3,744	2,411	4.55	123	8,145	8,268	123	818	941	2,612	3,091,923	3,094,536	632	50.4	640	3,126,002
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	12.3	11.0	17.0	122	0.47	0.29	8,145	8,145	0.28	818	818	—	48,063	48,063	1.10	2.05	1.76	48,704
Area	57.6	57.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	2,608,414	2,608,414	349	42.3	—	2,629,757
Water	—	—	—	—	—	—	—	—	—	—	—	1,143	1,965	3,108	117	2.82	—	6,883
Waste	—	—	—	—	—	—	—	—	—	—	—	1,470	0.00	1,470	147	0.00	—	5,141
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	572	572
Stationary	916	834	3,728	2,126	4.01	123	0.00	123	123	0.00	123	0.00	426,473	426,473	17.1	3.34	0.00	427,897
Total	986	902	3,745	2,247	4.48	123	8,145	8,268	123	818	941	2,612	3,084,916	3,087,528	632	50.5	574	3,118,955
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	8.90	8.03	11.3	100	0.35	0.20	5,564	5,565	0.19	559	559	—	35,151	35,151	0.74	1.40	20.3	35,606
Area	70.2	69.2	0.60	70.7	< 0.005	0.13	—	0.13	0.09	—	0.09	—	291	291	0.01	< 0.005	—	292

Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	2,608,41	2,608,41	349	42.3	—	2,629,75
Water	—	—	—	—	—	—	—	—	—	—	—	1,143	1,965	3,108	117	2.82	—	6,883
Waste	—	—	—	—	—	—	—	—	—	—	—	1,470	0.00	1,470	147	0.00	—	5,141
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	572	572
Stationary	125	114	511	291	0.55	16.8	0.00	16.8	16.8	0.00	16.8	0.00	58,421	58,421	2.35	0.46	0.00	58,616
Total	205	191	523	462	0.90	17.1	5,564	5,582	17.1	559	576	2,612	2,704,243	2,706,855	617	47.0	593	2,736,868
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.62	1.46	2.07	18.3	0.06	0.04	1,016	1,016	0.03	102	102	—	5,820	5,820	0.12	0.23	3.36	5,895
Area	12.8	12.6	0.11	12.9	< 0.005	0.02	—	0.02	0.02	—	0.02	—	48.2	48.2	< 0.005	< 0.005	—	48.3
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	431,853	431,853	57.8	7.01	—	435,386
Water	—	—	—	—	—	—	—	—	—	—	—	189	325	515	19.4	0.47	—	1,140
Waste	—	—	—	—	—	—	—	—	—	—	—	243	0.00	243	24.3	0.00	—	851
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	94.8	94.8
Stationary	22.9	20.8	93.2	53.1	0.10	3.07	0.00	3.07	3.07	0.00	3.07	0.00	9,672	9,672	0.39	0.08	0.00	9,705
Total	37.3	34.9	95.4	84.3	0.16	3.13	1,016	1,019	3.12	102	105	432	447,718	448,151	102	7.78	98.1	453,120

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	14.3	13.0	15.0	189	0.54	0.29	8,145	8,145	0.28	818	818	—	54,677	54,677	1.08	1.96	67.9	55,356
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	14.3	13.0	15.0	189	0.54	0.29	8,145	8,145	0.28	818	818	—	54,677	54,677	1.08	1.96	67.9	55,356
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	12.3	11.0	17.0	122	0.47	0.29	8,145	8,145	0.28	818	818	—	48,063	48,063	1.10	2.05	1.76	48,704
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	12.3	11.0	17.0	122	0.47	0.29	8,145	8,145	0.28	818	818	—	48,063	48,063	1.10	2.05	1.76	48,704
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	1.62	1.46	2.07	18.3	0.06	0.04	1,016	1,016	0.03	102	102	—	5,820	5,820	0.12	0.23	3.36	5,895
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	1.62	1.46	2.07	18.3	0.06	0.04	1,016	1,016	0.03	102	102	—	5,820	5,820	0.12	0.23	3.36	5,895

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	2,601,909	2,601,909	348	42.2	—	2,623,199
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	6,505	6,505	0.87	0.11	—	6,558
Total	—	—	—	—	—	—	—	—	—	—	—	—	2,608,414	2,608,414	349	42.3	—	2,629,757
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	2,601,909	2,601,909	348	42.2	—	2,623,199
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	6,505	6,505	0.87	0.11	—	6,558
Total	—	—	—	—	—	—	—	—	—	—	—	—	2,608,414	2,608,414	349	42.3	—	2,629,757
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	430,776	430,776	57.7	6.99	—	434,300
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	1,077	1,077	0.14	0.02	—	1,086
Total	—	—	—	—	—	—	—	—	—	—	—	—	431,853	431,853	57.8	7.01	—	435,386

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	47.9	47.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architectural Coating	9.64	9.64	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	17.0	15.7	0.80	95.6	0.01	0.17	—	0.17	0.13	—	0.13	—	393	393	0.02	< 0.005	—	395
Total	74.6	73.3	0.80	95.6	0.01	0.17	—	0.17	0.13	—	0.13	—	393	393	0.02	< 0.005	—	395
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	47.9	47.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	9.64	9.64	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	57.6	57.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	8.75	8.75	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	1.76	1.76	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	2.30	2.12	0.11	12.9	< 0.005	0.02	—	0.02	0.02	—	0.02	—	48.2	48.2	< 0.005	< 0.005	—	48.3
Total	12.8	12.6	0.11	12.9	< 0.005	0.02	—	0.02	0.02	—	0.02	—	48.2	48.2	< 0.005	< 0.005	—	48.3

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	1,143	1,965	3,108	117	2.82	—	6,883
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1,143	1,965	3,108	117	2.82	—	6,883
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	1,143	1,965	3,108	117	2.82	—	6,883
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1,143	1,965	3,108	117	2.82	—	6,883
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	189	325	515	19.4	0.47	—	1,140
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	189	325	515	19.4	0.47	—	1,140

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	1,470	0.00	1,470	147	0.00	—	5,141
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1,470	0.00	1,470	147	0.00	—	5,141
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	1,470	0.00	1,470	147	0.00	—	5,141
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1,470	0.00	1,470	147	0.00	—	5,141
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	243	0.00	243	24.3	0.00	—	851
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	243	0.00	243	24.3	0.00	—	851

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	572	572
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	572	572
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	572	572
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	572	572
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	94.8	94.8
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	94.8	94.8

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	916	834	3,728	2,126	4.01	123	0.00	123	123	0.00	123	0.00	426,473	426,473	17.1	3.34	0.00	427,897
Total	916	834	3,728	2,126	4.01	123	0.00	123	123	0.00	123	0.00	426,473	426,473	17.1	3.34	0.00	427,897
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	916	834	3,728	2,126	4.01	123	0.00	123	123	0.00	123	0.00	426,473	426,473	17.1	3.34	0.00	427,897
Total	916	834	3,728	2,126	4.01	123	0.00	123	123	0.00	123	0.00	426,473	426,473	17.1	3.34	0.00	427,897
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	22.9	20.8	93.2	53.1	0.10	3.07	0.00	3.07	3.07	0.00	3.07	0.00	9,672	9,672	0.39	0.08	0.00	9,705

Total	22.9	20.8	93.2	53.1	0.10	3.07	0.00	3.07	3.07	0.00	3.07	0.00	9,672	9,672	0.39	0.08	0.00	9,705

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
General Heavy Industry	2,177	3,562	2,815	900,082	44,342	72,560	57,331	18,333,538
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	3,298,442	1,099,481	659,688

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	270

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
General Heavy Industry	3,852,579,032	247	0.0330	0.0040	0.00
Parking Lot	9,631,445	247	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
General Heavy Industry	596,338,939	26,393,498
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
General Heavy Industry	2,727	—
Parking Lot	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
General Heavy Industry	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
Emergency Generator	Diesel	127	1.00	50.0	4,000	0.73

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	32.8	annual days of extreme heat
Extreme Precipitation	0.00	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.19	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	11.6

AQ-PM	19.1
AQ-DPM	9.09
Drinking Water	30.6
Lead Risk Housing	50.8
Pesticides	90.5
Toxic Releases	7.58
Traffic	3.06
Effect Indicators	—
CleanUp Sites	74.2
Groundwater	77.9
Haz Waste Facilities/Generators	93.2
Impaired Water Bodies	100.0
Solid Waste	86.5
Sensitive Population	—
Asthma	87.6
Cardio-vascular	83.2
Low Birth Weights	26.9
Socioeconomic Factor Indicators	—
Education	82.7
Housing	51.4
Linguistic	88.8
Poverty	94.9
Unemployment	99.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—

Above Poverty	16.66880534
Employed	7.173104068
Median HI	5.299627871
Education	—
Bachelor's or higher	5.017323239
High school enrollment	16.8741178
Preschool enrollment	68.89516233
Transportation	—
Auto Access	18.40112922
Active commuting	51.10997049
Social	—
2-parent households	13.28114975
Voting	16.79712563
Neighborhood	—
Alcohol availability	70.25535737
Park access	33.85089183
Retail density	4.311561658
Supermarket access	49.58295907
Tree canopy	0.782753753
Housing	—
Homeownership	38.3036058
Housing habitability	30.96368536
Low-inc homeowner severe housing cost burden	26.76761196
Low-inc renter severe housing cost burden	52.89362248
Uncrowded housing	38.58591043
Health Outcomes	—
Insured adults	21.00603105
Arthritis	0.0

Asthma ER Admissions	30.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	41.7
Cognitively Disabled	50.3
Physically Disabled	19.5
Heart Attack ER Admissions	46.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	54.3
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	14.1
Elderly	42.0
English Speaking	18.7
Foreign-born	65.3

Outdoor Workers	5.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	85.8
Traffic Density	4.9
Traffic Access	23.0
Other Indices	—
Hardship	92.9
Other Decision Support	—
2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	82.0
Healthy Places Index Score for Project Location (b)	11.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Land use data are based on applicant-provided buildout assumptions.
Operations: Vehicle Data	Trip rates based on ITE Land Use Code 160.
Operations: Landscape Equipment	Assumed 270 summer days for desert region.
Operations: Emergency Generators and Fire Pumps	Assumed 127 back-up generators each operating 1 hour/day and 50 hours/year for maintenance and testing.
Operations: Road Dust	All roads used by future developments projects within the Specific Plan Area would be required to be paved. Per ICAPCD guidance a value of 85% paved is assumed in the modeling to account for the high levels of entrained dust generated from vehicle travel on paved roadways in the region
Operations: Water and Waste Water	Water data are based on applicant-provided calculations for the land use.
Operations: Energy Use	Electricity data are based on anticipated electricity demand of data center.
Operations: Generators + Pumps EF	—

Lithium Valley Operation - Phase 1 - Emergency Services Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Lithium Valley Operation - Phase 1 - Emergency Services
Operational Year	2035
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	4.80
Location	33.18829759139308, -115.6026869228474
County	Imperial
City	Unincorporated
Air District	Imperial County APCD
Air Basin	Salton Sea
TAZ	5600
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
General Heavy Industry	363	1000sqft	217	363,386	72,677	—	—	—
Parking Lot	727	1000sqft	16.7	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	27.5	25.8	24.5	178	0.47	0.99	6,514	6,515	0.97	654	655	596	57,736	58,331	62.8	2.59	149	60,822
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	23.1	21.6	25.9	108	0.41	0.96	6,514	6,515	0.94	654	655	596	52,381	52,977	62.9	2.66	96.0	55,437
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	19.4	18.3	13.6	95.8	0.30	0.49	4,458	4,459	0.48	448	448	596	40,706	41,301	62.5	2.13	111	43,608
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.53	3.34	2.48	17.5	0.05	0.09	814	814	0.09	81.7	81.8	98.6	6,739	6,838	10.4	0.35	18.4	7,220

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	11.4	10.4	12.0	151	0.43	0.23	6,514	6,514	0.22	654	654	—	43,728	43,728	0.86	1.57	54.3	44,271

Area	12.1	11.9	0.13	15.8	< 0.005	0.03	—	0.03	0.02	—	0.02	—	65.0	65.0	< 0.005	< 0.005	—	65.2
Energy	0.35	0.17	3.17	2.66	0.02	0.24	—	0.24	0.24	—	0.24	—	11,668	11,668	1.39	0.14	—	11,743
Water	—	—	—	—	—	—	—	—	—	—	—	353	596	949	36.3	0.87	—	2,114
Waste	—	—	—	—	—	—	—	—	—	—	—	243	0.00	243	24.3	0.00	—	850
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	94.6	94.6
Stationary	3.61	3.28	9.17	8.37	0.02	0.48	0.00	0.48	0.48	0.00	0.48	0.00	1,679	1,679	0.07	0.01	0.00	1,685
Total	27.5	25.8	24.5	178	0.47	0.99	6,514	6,515	0.97	654	655	596	57,736	58,331	62.8	2.59	149	60,822
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	9.81	8.81	13.6	97.2	0.38	0.23	6,514	6,514	0.22	654	654	—	38,438	38,438	0.88	1.64	1.41	38,951
Area	9.30	9.30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.35	0.17	3.17	2.66	0.02	0.24	—	0.24	0.24	—	0.24	—	11,668	11,668	1.39	0.14	—	11,743
Water	—	—	—	—	—	—	—	—	—	—	—	353	596	949	36.3	0.87	—	2,114
Waste	—	—	—	—	—	—	—	—	—	—	—	243	0.00	243	24.3	0.00	—	850
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	94.6	94.6
Stationary	3.61	3.28	9.17	8.37	0.02	0.48	0.00	0.48	0.48	0.00	0.48	0.00	1,679	1,679	0.07	0.01	0.00	1,685
Total	23.1	21.6	25.9	108	0.41	0.96	6,514	6,515	0.94	654	655	596	52,381	52,977	62.9	2.66	96.0	55,437
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	7.13	6.43	9.09	80.3	0.28	0.16	4,458	4,458	0.15	448	448	—	28,164	28,164	0.60	1.12	16.3	28,528
Area	11.4	11.2	0.10	11.7	< 0.005	0.02	—	0.02	0.02	—	0.02	—	48.1	48.1	< 0.005	< 0.005	—	48.2
Energy	0.35	0.17	3.17	2.66	0.02	0.24	—	0.24	0.24	—	0.24	—	11,668	11,668	1.39	0.14	—	11,743
Water	—	—	—	—	—	—	—	—	—	—	—	353	596	949	36.3	0.87	—	2,114
Waste	—	—	—	—	—	—	—	—	—	—	—	243	0.00	243	24.3	0.00	—	850
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	94.6	94.6
Stationary	0.49	0.45	1.26	1.15	< 0.005	0.07	0.00	0.07	0.07	0.00	0.07	0.00	230	230	0.01	< 0.005	0.00	231
Total	19.4	18.3	13.6	95.8	0.30	0.49	4,458	4,459	0.48	448	448	596	40,706	41,301	62.5	2.13	111	43,608

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.30	1.17	1.66	14.7	0.05	0.03	814	814	0.03	81.7	81.7	—	4,663	4,663	0.10	0.19	2.69	4,723
Area	2.08	2.05	0.02	2.13	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.96	7.96	< 0.005	< 0.005	—	7.99
Energy	0.06	0.03	0.58	0.49	< 0.005	0.04	—	0.04	0.04	—	0.04	—	1,932	1,932	0.23	0.02	—	1,944
Water	—	—	—	—	—	—	—	—	—	—	—	58.4	98.7	157	6.00	0.14	—	350
Waste	—	—	—	—	—	—	—	—	—	—	—	40.2	0.00	40.2	4.02	0.00	—	141
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15.7	15.7
Stationary	0.09	0.08	0.23	0.21	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	38.1	38.1	< 0.005	< 0.005	0.00	38.2
Total	3.53	3.34	2.48	17.5	0.05	0.09	814	814	0.09	81.7	81.8	98.6	6,739	6,838	10.4	0.35	18.4	7,220

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	11.4	10.4	12.0	151	0.43	0.23	6,514	6,514	0.22	654	654	—	43,728	43,728	0.86	1.57	54.3	44,271
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	11.4	10.4	12.0	151	0.43	0.23	6,514	6,514	0.22	654	654	—	43,728	43,728	0.86	1.57	54.3	44,271
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	9.81	8.81	13.6	97.2	0.38	0.23	6,514	6,514	0.22	654	654	—	38,438	38,438	0.88	1.64	1.41	38,951
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	9.81	8.81	13.6	97.2	0.38	0.23	6,514	6,514	0.22	654	654	—	38,438	38,438	0.88	1.64	1.41	38,951
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	1.30	1.17	1.66	14.7	0.05	0.03	814	814	0.03	81.7	81.7	—	4,663	4,663	0.10	0.19	2.69	4,723
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	1.30	1.17	1.66	14.7	0.05	0.03	814	814	0.03	81.7	81.7	—	4,663	4,663	0.10	0.19	2.69	4,723

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	7,454	7,454	1.00	0.12	—	7,515
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	430	430	0.06	0.01	—	433
Total	—	—	—	—	—	—	—	—	—	—	—	—	7,884	7,884	1.06	0.13	—	7,949
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	7,454	7,454	1.00	0.12	—	7,515
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	430	430	0.06	0.01	—	433
Total	—	—	—	—	—	—	—	—	—	—	—	—	7,884	7,884	1.06	0.13	—	7,949
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	1,234	1,234	0.17	0.02	—	1,244
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	71.2	71.2	0.01	< 0.005	—	71.8
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,305	1,305	0.17	0.02	—	1,316

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.35	0.17	3.17	2.66	0.02	0.24	—	0.24	0.24	—	0.24	—	3,783	3,783	0.33	0.01	—	3,794
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.35	0.17	3.17	2.66	0.02	0.24	—	0.24	0.24	—	0.24	—	3,783	3,783	0.33	0.01	—	3,794
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.35	0.17	3.17	2.66	0.02	0.24	—	0.24	0.24	—	0.24	—	3,783	3,783	0.33	0.01	—	3,794

Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.35	0.17	3.17	2.66	0.02	0.24	—	0.24	0.24	—	0.24	—	3,783	3,783	0.33	0.01	—	3,794
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.06	0.03	0.58	0.49	< 0.005	0.04	—	0.04	0.04	—	0.04	—	626	626	0.06	< 0.005	—	628
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.06	0.03	0.58	0.49	< 0.005	0.04	—	0.04	0.04	—	0.04	—	626	626	0.06	< 0.005	—	628

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	7.83	7.83	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	1.47	1.47	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	2.81	2.60	0.13	15.8	< 0.005	0.03	—	0.03	0.02	—	0.02	—	65.0	65.0	< 0.005	< 0.005	—	65.2
Total	12.1	11.9	0.13	15.8	< 0.005	0.03	—	0.03	0.02	—	0.02	—	65.0	65.0	< 0.005	< 0.005	—	65.2
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Consum Products	7.83	7.83	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	1.47	1.47	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	9.30	9.30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	1.43	1.43	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.27	0.27	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.38	0.35	0.02	2.13	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.96	7.96	< 0.005	< 0.005	—	7.99
Total	2.08	2.05	0.02	2.13	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.96	7.96	< 0.005	< 0.005	—	7.99

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	353	596	949	36.3	0.87	—	2,114

Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	353	596	949	36.3	0.87	—	2,114
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	353	596	949	36.3	0.87	—	2,114
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	353	596	949	36.3	0.87	—	2,114
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	58.4	98.7	157	6.00	0.14	—	350
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	58.4	98.7	157	6.00	0.14	—	350

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	243	0.00	243	24.3	0.00	—	850
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Total	—	—	—	—	—	—	—	—	—	—	—	243	0.00	243	24.3	0.00	—	850
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	243	0.00	243	24.3	0.00	—	850
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	243	0.00	243	24.3	0.00	—	850
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	40.2	0.00	40.2	4.02	0.00	—	141
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	40.2	0.00	40.2	4.02	0.00	—	141

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	94.6	94.6
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	94.6	94.6
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	94.6	94.6
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	94.6	94.6
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15.7	15.7
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15.7	15.7

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipm Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	3.61	3.28	9.17	8.37	0.02	0.48	0.00	0.48	0.48	0.00	0.48	0.00	1,679	1,679	0.07	0.01	0.00	1,685
Total	3.61	3.28	9.17	8.37	0.02	0.48	0.00	0.48	0.48	0.00	0.48	0.00	1,679	1,679	0.07	0.01	0.00	1,685
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	3.61	3.28	9.17	8.37	0.02	0.48	0.00	0.48	0.48	0.00	0.48	0.00	1,679	1,679	0.07	0.01	0.00	1,685
Total	3.61	3.28	9.17	8.37	0.02	0.48	0.00	0.48	0.48	0.00	0.48	0.00	1,679	1,679	0.07	0.01	0.00	1,685
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.09	0.08	0.23	0.21	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	38.1	38.1	< 0.005	< 0.005	0.00	38.2
Total	0.09	0.08	0.23	0.21	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	38.1	38.1	< 0.005	< 0.005	0.00	38.2

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Remove	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
General Heavy Industry	1,744	2,849	2,260	721,161	35,528	58,030	46,039	14,689,149
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	545,079	181,693	43,606

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	270

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
General Heavy Industry	11,037,641	247	0.0330	0.0040	11,804,450
Parking Lot	636,651	247	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
General Heavy Industry	184,094,336	3,259,149
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
General Heavy Industry	451	—
Parking Lot	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
General Heavy Industry	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
Emergency Generator	Diesel	4.00	1.00	50.0	500	0.73

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	32.8	annual days of extreme heat
Extreme Precipitation	0.00	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.19	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A

Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	11.6
AQ-PM	19.1
AQ-DPM	9.09
Drinking Water	30.6
Lead Risk Housing	50.8
Pesticides	90.5
Toxic Releases	7.58
Traffic	3.06
Effect Indicators	—
CleanUp Sites	74.2
Groundwater	77.9

Haz Waste Facilities/Generators	93.2
Impaired Water Bodies	100.0
Solid Waste	86.5
Sensitive Population	—
Asthma	87.6
Cardio-vascular	83.2
Low Birth Weights	26.9
Socioeconomic Factor Indicators	—
Education	82.7
Housing	51.4
Linguistic	88.8
Poverty	94.9
Unemployment	99.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	16.66880534
Employed	7.173104068
Median HI	5.299627871
Education	—
Bachelor's or higher	5.017323239
High school enrollment	16.8741178
Preschool enrollment	68.89516233
Transportation	—
Auto Access	18.40112922
Active commuting	51.10997049

Social	—
2-parent households	13.28114975
Voting	16.79712563
Neighborhood	—
Alcohol availability	70.25535737
Park access	33.85089183
Retail density	4.311561658
Supermarket access	49.58295907
Tree canopy	0.782753753
Housing	—
Homeownership	38.3036058
Housing habitability	30.96368536
Low-inc homeowner severe housing cost burden	26.76761196
Low-inc renter severe housing cost burden	52.89362248
Uncrowded housing	38.58591043
Health Outcomes	—
Insured adults	21.00603105
Arthritis	0.0
Asthma ER Admissions	30.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	41.7
Cognitively Disabled	50.3
Physically Disabled	19.5

Heart Attack ER Admissions	46.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	54.3
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	14.1
Elderly	42.0
English Speaking	18.7
Foreign-born	65.3
Outdoor Workers	5.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	85.8
Traffic Density	4.9
Traffic Access	23.0
Other Indices	—
Hardship	92.9
Other Decision Support	—
2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	82.0
Healthy Places Index Score for Project Location (b)	11.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Land use data are based on applicant-provided buildout assumptions.
Operations: Vehicle Data	Trip rates are based on ITE Land Use Code 575 PM rate.
Operations: Landscape Equipment	Assumed 270 summer days for desert region.
Operations: Road Dust	All roads used by future developments projects within the Specific Plan Area would be required to be paved. Per ICAPCD guidance a value of 85% paved is assumed in the modeling to account for the high levels of entrained dust generated from vehicle travel on paved roadways in the region
Operations: Water and Waste Water	Water data are based on applicant-provided calculations for the land use.
Operations: Emergency Generators and Fire Pumps	Assumed 4 back-up generators each operating 1 hour/day and 50 hours/year for maintenance and testing.

Lithium Valley Operation - Phase 1 - EV Charging Stations Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Lithium Valley Operation - Phase 1 - EV Charging Stations
Operational Year	2035
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	4.80
Location	33.18829759139308, -115.6026869228474
County	Imperial
City	Unincorporated
Air District	Imperial County APCD
Air Basin	Salton Sea
TAZ	5600
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Parking Lot	2,020	1000sqft	46.4	0.00	404,005	—	—	—
Other Asphalt Surfaces	2,020	1000sqft	46.4	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.78	0.78	0.00	0.00	0.00	0.00	11,248	11,248	0.00	1,132	1,132	0.00	12,170	12,170	1.63	0.20	0.00	12,270
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.78	0.78	0.00	0.00	0.00	0.00	11,248	11,248	0.00	1,132	1,132	0.00	12,170	12,170	1.63	0.20	0.00	12,270
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.78	0.78	0.00	0.00	0.00	0.00	11,101	11,101	0.00	1,117	1,117	0.00	12,170	12,170	1.63	0.20	0.00	12,270
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.14	0.14	0.00	0.00	0.00	0.00	2,026	2,026	0.00	204	204	0.00	2,015	2,015	0.27	0.03	0.00	2,031

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	11,248	11,248	0.00	1,132	1,132	—	0.00	0.00	0.00	0.00	0.00	0.00

Area	0.78	0.78	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	12,155	12,155	1.63	0.20	—	12,255
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	14.7	14.7	< 0.005	< 0.005	—	14.9
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	0.78	0.78	0.00	0.00	0.00	0.00	11,248	11,248	0.00	1,132	1,132	0.00	12,170	12,170	1.63	0.20	0.00	12,270
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	11,248	11,248	0.00	1,132	1,132	—	0.00	0.00	0.00	0.00	0.00	0.00
Area	0.78	0.78	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	12,155	12,155	1.63	0.20	—	12,255
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	14.7	14.7	< 0.005	< 0.005	—	14.9
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	0.78	0.78	0.00	0.00	0.00	0.00	11,248	11,248	0.00	1,132	1,132	0.00	12,170	12,170	1.63	0.20	0.00	12,270
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	11,101	11,101	0.00	1,117	1,117	—	0.00	0.00	0.00	0.00	0.00	0.00
Area	0.78	0.78	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	12,155	12,155	1.63	0.20	—	12,255
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	14.7	14.7	< 0.005	< 0.005	—	14.9
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	0.78	0.78	0.00	0.00	0.00	0.00	11,101	11,101	0.00	1,117	1,117	0.00	12,170	12,170	1.63	0.20	0.00	12,270
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	2,026	2,026	0.00	204	204	—	0.00	0.00	0.00	0.00	0.00	0.00
Area	0.14	0.14	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	2,012	2,012	0.27	0.03	—	2,029
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	2.44	2.44	< 0.005	< 0.005	—	2.46
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	0.14	0.14	0.00	0.00	0.00	0.00	2,026	2,026	0.00	204	204	0.00	2,015	2,015	0.27	0.03	0.00	2,031

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	6,734	6,734	0.00	679	679	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	4,515	4,515	0.00	453	453	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	11,248	11,248	0.00	1,132	1,132	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	6,734	6,734	0.00	679	679	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	4,515	4,515	0.00	453	453	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	11,248	11,248	0.00	1,132	1,132	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	1,213	1,213	0.00	122	122	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	813	813	0.00	81.6	81.6	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	2,026	2,026	0.00	204	204	—	0.00	0.00	0.00	0.00	0.00	0.00

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	12,155	12,155	1.63	0.20	—	12,255
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	12,155	12,155	1.63	0.20	—	12,255
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	12,155	12,155	1.63	0.20	—	12,255
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	12,155	12,155	1.63	0.20	—	12,255
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	2,012	2,012	0.27	0.03	—	2,029
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	2,012	2,012	0.27	0.03	—	2,029

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.32	0.32	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.46	0.46	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.78	0.78	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.32	0.32	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.46	0.46	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.78	0.78	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.06	0.06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.08	0.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Landscape	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.14	0.14	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	14.7	14.7	< 0.005	< 0.005	—	14.9
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	14.7	14.7	< 0.005	< 0.005	—	14.9
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	14.7	14.7	< 0.005	< 0.005	—	14.9
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	14.7	14.7	< 0.005	< 0.005	—	14.9
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	2.44	2.44	< 0.005	< 0.005	—	2.46
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Total	—	—	—	—	—	—	—	—	—	—	—	0.00	2.44	2.44	< 0.005	< 0.005	—	2.46

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Parking Lot	2,940	2,940	2,940	1,073,044	59,881	59,881	59,881	21,856,560
Other Asphalt Surfaces	1,975	1,975	1,975	720,796	40,224	40,224	40,224	14,681,715

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	0.00	0.00	242,402

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	270

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Parking Lot	17,998,063	247	0.0330	0.0040	0.00
Other Asphalt Surfaces	0.00	247	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Parking Lot	0.00	6,777,570
Other Asphalt Surfaces	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)

Parking Lot	0.00	—
Other Asphalt Surfaces	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	32.8	annual days of extreme heat
Extreme Precipitation	0.00	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.19	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	11.6
AQ-PM	19.1
AQ-DPM	9.09
Drinking Water	30.6
Lead Risk Housing	50.8
Pesticides	90.5
Toxic Releases	7.58
Traffic	3.06
Effect Indicators	—
CleanUp Sites	74.2
Groundwater	77.9
Haz Waste Facilities/Generators	93.2
Impaired Water Bodies	100.0
Solid Waste	86.5
Sensitive Population	—
Asthma	87.6

Cardio-vascular	83.2
Low Birth Weights	26.9
Socioeconomic Factor Indicators	—
Education	82.7
Housing	51.4
Linguistic	88.8
Poverty	94.9
Unemployment	99.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	16.66880534
Employed	7.173104068
Median HI	5.299627871
Education	—
Bachelor's or higher	5.017323239
High school enrollment	16.8741178
Preschool enrollment	68.89516233
Transportation	—
Auto Access	18.40112922
Active commuting	51.10997049
Social	—
2-parent households	13.28114975
Voting	16.79712563
Neighborhood	—
Alcohol availability	70.25535737

Park access	33.85089183
Retail density	4.311561658
Supermarket access	49.58295907
Tree canopy	0.782753753
Housing	—
Homeownership	38.3036058
Housing habitability	30.96368536
Low-inc homeowner severe housing cost burden	26.76761196
Low-inc renter severe housing cost burden	52.89362248
Uncrowded housing	38.58591043
Health Outcomes	—
Insured adults	21.00603105
Arthritis	0.0
Asthma ER Admissions	30.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	41.7
Cognitively Disabled	50.3
Physically Disabled	19.5
Heart Attack ER Admissions	46.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	54.3

Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	14.1
Elderly	42.0
English Speaking	18.7
Foreign-born	65.3
Outdoor Workers	5.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	85.8
Traffic Density	4.9
Traffic Access	23.0
Other Indices	—
Hardship	92.9
Other Decision Support	—
2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	82.0
Healthy Places Index Score for Project Location (b)	11.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes

Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Operations: Landscape Equipment	Assumed 270 summer days for desert region.
Operations: Road Dust	85% of roads assumed to be paved based on ICAPCD guidance and project narrative.
Operations: Fleet Mix	"Parking Lot" land use subtype encompasses EV truck trips, conservatively assumed to be 100% HHD vehicles. "Other Asphalt Surfaces" land use subtype encompasses passenger vehicle trips, conservatively assumed to be 50% LDA and 50% LDT1 vehicles.
Operations: Vehicle Data	Trip rates adjusted per EV charging station trip generation methodology.
Operations: Vehicle EF	EV vehicle trips only emit PM from tire and break wear and tear. All other emission factors assumed to be 0, for those applicable vehicle classes.
Operations: Energy Use	Electricity demand is based on example EV charging stations and scaled based on project size.
Operations: Water and Waste Water	Water data are based on applicant-provided calculations for the land use.

Lithium Valley Operation - Phase 1 - Floatovoltaics Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Lithium Valley Operation - Phase 1 - Floatovoltaics
Operational Year	2035
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	4.80
Location	33.18829759139308, -115.6026869228474
County	Imperial
City	Unincorporated
Air District	Imperial County APCD
Air Basin	Salton Sea
TAZ	5600
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
General Heavy Industry	10.0	1000sqft	208	10,000	2,000	—	—	—
Parking Lot	20.0	1000sqft	0.46	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.34	0.34	0.01	0.56	< 0.005	< 0.005	5.39	5.39	< 0.005	0.54	0.54	6.68	1,036	1,042	0.80	0.02	361	1,428
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.26	0.26	0.01	0.08	< 0.005	< 0.005	5.39	5.39	< 0.005	0.54	0.54	6.68	1,030	1,036	0.80	0.02	360	1,422
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.32	0.31	0.01	0.36	< 0.005	< 0.005	1.90	1.90	< 0.005	0.19	0.19	6.68	1,011	1,018	0.80	0.02	360	1,403
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.06	0.06	< 0.005	0.07	< 0.005	< 0.005	0.35	0.35	< 0.005	0.03	0.03	1.11	167	169	0.13	< 0.005	59.7	232

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.01	0.01	0.01	0.12	< 0.005	< 0.005	5.39	5.39	< 0.005	0.54	0.54	—	36.1	36.1	< 0.005	< 0.005	0.04	36.5

Area	0.33	0.33	< 0.005	0.43	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.79	1.79	< 0.005	< 0.005	—	1.79
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	998	998	0.13	0.02	—	1,006
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	6.68	0.00	6.68	0.67	0.00	—	23.4
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	360	360
Total	0.34	0.34	0.01	0.56	< 0.005	< 0.005	5.39	5.39	< 0.005	0.54	0.54	6.68	1,036	1,042	0.80	0.02	361	1,428
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.01	0.01	0.01	0.08	< 0.005	< 0.005	5.39	5.39	< 0.005	0.54	0.54	—	31.7	31.7	< 0.005	< 0.005	< 0.005	32.1
Area	0.26	0.26	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	998	998	0.13	0.02	—	1,006
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	6.68	0.00	6.68	0.67	0.00	—	23.4
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	360	360
Total	0.26	0.26	0.01	0.08	< 0.005	< 0.005	5.39	5.39	< 0.005	0.54	0.54	6.68	1,030	1,036	0.80	0.02	360	1,422
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	< 0.005	< 0.005	< 0.005	0.04	< 0.005	< 0.005	1.90	1.90	< 0.005	0.19	0.19	—	12.1	12.1	< 0.005	< 0.005	0.01	12.3
Area	0.31	0.31	< 0.005	0.32	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.32	1.32	< 0.005	< 0.005	—	1.33
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	998	998	0.13	0.02	—	1,006
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	6.68	0.00	6.68	0.67	0.00	—	23.4
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	360	360
Total	0.32	0.31	0.01	0.36	< 0.005	< 0.005	1.90	1.90	< 0.005	0.19	0.19	6.68	1,011	1,018	0.80	0.02	360	1,403
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	0.35	0.35	< 0.005	0.03	0.03	—	2.00	2.00	< 0.005	< 0.005	< 0.005	2.03
Area	0.06	0.06	< 0.005	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.22	0.22	< 0.005	< 0.005	—	0.22
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	165	165	0.02	< 0.005	—	167

Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	1.11	0.00	1.11	0.11	0.00	—	3.87
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	59.7	59.7
Total	0.06	0.06	< 0.005	0.07	< 0.005	< 0.005	0.35	0.35	< 0.005	0.03	0.03	1.11	167	169	0.13	< 0.005	59.7	232

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Mobile source emissions results are presented in Sections 2.6. No further detailed breakdown of emissions is available.

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	986	986	0.13	0.02	—	994
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	11.8	11.8	< 0.005	< 0.005	—	11.9
Total	—	—	—	—	—	—	—	—	—	—	—	—	998	998	0.13	0.02	—	1,006
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	986	986	0.13	0.02	—	994

Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	11.8	11.8	< 0.005	< 0.005	—	11.9
Total	—	—	—	—	—	—	—	—	—	—	—	—	998	998	0.13	0.02	—	1,006
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	163	163	0.02	< 0.005	—	165
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	1.96	1.96	< 0.005	< 0.005	—	1.98
Total	—	—	—	—	—	—	—	—	—	—	—	—	165	165	0.02	< 0.005	—	167

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.22	0.22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.04	0.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.08	0.07	< 0.005	0.43	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.79	1.79	< 0.005	< 0.005	—	1.79
Total	0.33	0.33	< 0.005	0.43	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.79	1.79	< 0.005	< 0.005	—	1.79
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.22	0.22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architect Coatings	0.04	0.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.26	0.26	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.04	0.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.01	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.01	0.01	< 0.005	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.22	0.22	< 0.005	< 0.005	—	0.22
Total	0.06	0.06	< 0.005	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.22	0.22	< 0.005	< 0.005	—	0.22

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	6.68	0.00	6.68	0.67	0.00	—	23.4
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	6.68	0.00	6.68	0.67	0.00	—	23.4

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	6.68	0.00	6.68	0.67	0.00	—	23.4
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	6.68	0.00	6.68	0.67	0.00	—	23.4
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	1.11	0.00	1.11	0.11	0.00	—	3.87
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1.11	0.00	1.11	0.11	0.00	—	3.87

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	360	360
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	360	360
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	360	360
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	360	360
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	59.7	59.7
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	59.7	59.7

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipm Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Remove	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Total all Land Uses	2.00	0.00	0.00	521	48.0	0.00	0.00	6,257

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	15,000	5,000	1,200

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	270

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
General Heavy Industry	1,460,000	247	0.0330	0.0040	0.00
Parking Lot	17,520	247	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
General Heavy Industry	0.00	0.00
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
General Heavy Industry	12.4	—
Parking Lot	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
General Heavy Industry	User Defined	User Defined	23,900	22.7	0.50	0.50	30.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
Emergency Generator	Diesel	1.00	1.00	50.0	500	0.73

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type
—	—

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	32.8	annual days of extreme heat
Extreme Precipitation	0.00	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.19	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	11.6
AQ-PM	19.1
AQ-DPM	9.09
Drinking Water	30.6
Lead Risk Housing	50.8
Pesticides	90.5
Toxic Releases	7.58
Traffic	3.06
Effect Indicators	—
CleanUp Sites	74.2
Groundwater	77.9
Haz Waste Facilities/Generators	93.2
Impaired Water Bodies	100.0
Solid Waste	86.5
Sensitive Population	—
Asthma	87.6
Cardio-vascular	83.2
Low Birth Weights	26.9
Socioeconomic Factor Indicators	—

Education	82.7
Housing	51.4
Linguistic	88.8
Poverty	94.9
Unemployment	99.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	16.66880534
Employed	7.173104068
Median HI	5.299627871
Education	—
Bachelor's or higher	5.017323239
High school enrollment	16.8741178
Preschool enrollment	68.89516233
Transportation	—
Auto Access	18.40112922
Active commuting	51.10997049
Social	—
2-parent households	13.28114975
Voting	16.79712563
Neighborhood	—
Alcohol availability	70.25535737
Park access	33.85089183
Retail density	4.311561658
Supermarket access	49.58295907

Tree canopy	0.782753753
Housing	—
Homeownership	38.3036058
Housing habitability	30.96368536
Low-inc homeowner severe housing cost burden	26.76761196
Low-inc renter severe housing cost burden	52.89362248
Uncrowded housing	38.58591043
Health Outcomes	—
Insured adults	21.00603105
Arthritis	0.0
Asthma ER Admissions	30.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	41.7
Cognitively Disabled	50.3
Physically Disabled	19.5
Heart Attack ER Admissions	46.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	54.3
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—

Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	14.1
Elderly	42.0
English Speaking	18.7
Foreign-born	65.3
Outdoor Workers	5.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	85.8
Traffic Density	4.9
Traffic Access	23.0
Other Indices	—
Hardship	92.9
Other Decision Support	—
2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	82.0
Healthy Places Index Score for Project Location (b)	11.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Operations: Landscape Equipment	Assumed 270 summer days for desert region.
Operations: Energy Use	Electricity consumption assumed to include system auxiliary energy consumption (2%), based on an assumed capacity of 50 MW system, operating 4 hours/day and 365 days/year.
Operations: Refrigerants	Assumed 500 pounds of SF6 as part of project operations for breakers/inverters.
Land Use	Land use data are based on applicant-provided buildout assumptions. 10,000 square feet of building space included for operation.
Operations: Emergency Generators and Fire Pumps	Assumed 1 back-up generator operating 1 hour/day and 50 hours/year as part of project operations.
Operations: Road Dust	85% of roads assumed to be paved based on ICAPCD guidance and project narrative.
Operations: Water and Waste Water	RICK does not assumed water demand for the floodways land use designation. Any water use generated by this land use would be assumed to be included in the 'solar' land use's demand.

Lithium Valley Operation - Phase 1 - Green Hydrogen Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Lithium Valley Operation - Phase 1 - Green Hydrogen
Operational Year	2035
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	4.80
Location	33.18829759139308, -115.6026869228474
County	Imperial
City	Unincorporated
Air District	Imperial County APCD
Air Basin	Salton Sea
TAZ	5600
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
General Heavy Industry	1,347	1000sqft	638	1,346,781	269,356	—	—	—
Parking Lot	2,694	1000sqft	61.8	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	66.1	59.6	33.1	238	0.77	7.23	3,788	3,795	7.19	380	388	2,310	158,550	160,860	242	5.92	382	169,065
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	54.7	49.1	33.5	148	0.74	7.12	3,788	3,795	7.11	380	387	2,310	155,234	157,544	242	5.97	351	165,730
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	55.7	50.3	19.3	167	0.64	6.26	2,583	2,589	6.24	259	266	2,310	142,953	145,263	242	5.59	360	153,338
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	10.2	9.19	3.52	30.5	0.12	1.14	471	473	1.14	47.3	48.5	382	23,667	24,050	40.1	0.93	59.6	25,387

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	6.65	6.05	6.98	88.1	0.25	0.14	3,788	3,788	0.13	380	380	—	25,426	25,426	0.50	0.91	31.6	25,742

Area	44.9	44.1	0.49	58.6	< 0.005	0.10	—	0.10	0.08	—	0.08	—	241	241	0.01	< 0.005	—	242
Energy	1.29	0.65	11.8	9.87	0.07	0.89	—	0.89	0.89	—	0.89	—	43,259	43,259	5.15	0.50	—	43,537
Water	—	—	—	—	—	—	—	—	—	—	—	1,410	2,383	3,793	145	3.47	—	8,452
Waste	—	—	—	—	—	—	—	—	—	—	—	900	0.00	900	90.0	0.00	—	3,149
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	351	351
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	13.2	8.83	13.8	81.8	0.45	6.09	0.00	6.09	6.09	0.00	6.09	0.00	87,241	87,241	1.73	1.04	0.00	87,593
Total	66.1	59.6	33.1	238	0.77	7.23	3,788	3,795	7.19	380	388	2,310	158,550	160,860	242	5.92	382	169,065
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	5.70	5.12	7.89	56.5	0.22	0.14	3,788	3,788	0.13	380	380	—	22,350	22,350	0.51	0.95	0.82	22,648
Area	34.5	34.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	1.29	0.65	11.8	9.87	0.07	0.89	—	0.89	0.89	—	0.89	—	43,259	43,259	5.15	0.50	—	43,537
Water	—	—	—	—	—	—	—	—	—	—	—	1,410	2,383	3,793	145	3.47	—	8,452
Waste	—	—	—	—	—	—	—	—	—	—	—	900	0.00	900	90.0	0.00	—	3,149
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	351	351
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	13.2	8.83	13.8	81.8	0.45	6.09	0.00	6.09	6.09	0.00	6.09	0.00	87,241	87,241	1.73	1.04	0.00	87,593
Total	54.7	49.1	33.5	148	0.74	7.12	3,788	3,795	7.11	380	387	2,310	155,234	157,544	242	5.97	351	165,730
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	4.13	3.73	5.27	46.5	0.16	0.09	2,583	2,583	0.09	259	259	—	16,318	16,318	0.35	0.65	9.42	16,529
Area	42.2	41.6	0.36	43.3	< 0.005	0.08	—	0.08	0.06	—	0.06	—	178	178	0.01	< 0.005	—	179
Energy	1.29	0.65	11.8	9.87	0.07	0.89	—	0.89	0.89	—	0.89	—	43,254	43,254	5.15	0.50	—	43,533
Water	—	—	—	—	—	—	—	—	—	—	—	1,410	2,383	3,793	145	3.47	—	8,452
Waste	—	—	—	—	—	—	—	—	—	—	—	900	0.00	900	90.0	0.00	—	3,149

Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	351	351
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	8.12	4.37	1.90	67.4	0.41	5.20	0.00	5.20	5.20	0.00	5.20	0.00	80,819	80,819	1.56	0.97	0.00	81,146
Total	55.7	50.3	19.3	167	0.64	6.26	2,583	2,589	6.24	259	266	2,310	142,953	145,263	242	5.59	360	153,338
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.75	0.68	0.96	8.49	0.03	0.02	471	471	0.02	47.3	47.4	—	2,702	2,702	0.06	0.11	1.56	2,737
Area	7.70	7.59	0.07	7.91	< 0.005	0.01	—	0.01	0.01	—	0.01	—	29.5	29.5	< 0.005	< 0.005	—	29.6
Energy	0.24	0.12	2.14	1.80	0.01	0.16	—	0.16	0.16	—	0.16	—	7,161	7,161	0.85	0.08	—	7,207
Water	—	—	—	—	—	—	—	—	—	—	—	233	395	628	24.0	0.58	—	1,399
Waste	—	—	—	—	—	—	—	—	—	—	—	149	0.00	149	14.9	0.00	—	521
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	58.0	58.0
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	1.48	0.80	0.35	12.3	0.07	0.95	0.00	0.95	0.95	0.00	0.95	0.00	13,381	13,381	0.26	0.16	0.00	13,435
Total	10.2	9.19	3.52	30.5	0.12	1.14	471	473	1.14	47.3	48.5	382	23,667	24,050	40.1	0.93	59.6	25,387

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	6.65	6.05	6.98	88.1	0.25	0.14	3,788	3,788	0.13	380	380	—	25,426	25,426	0.50	0.91	31.6	25,742
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	6.65	6.05	6.98	88.1	0.25	0.14	3,788	3,788	0.13	380	380	—	25,426	25,426	0.50	0.91	31.6	25,742
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	5.70	5.12	7.89	56.5	0.22	0.14	3,788	3,788	0.13	380	380	—	22,350	22,350	0.51	0.95	0.82	22,648
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	5.70	5.12	7.89	56.5	0.22	0.14	3,788	3,788	0.13	380	380	—	22,350	22,350	0.51	0.95	0.82	22,648
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.75	0.68	0.96	8.49	0.03	0.02	471	471	0.02	47.3	47.4	—	2,702	2,702	0.06	0.11	1.56	2,737
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.75	0.68	0.96	8.49	0.03	0.02	471	471	0.02	47.3	47.4	—	2,702	2,702	0.06	0.11	1.56	2,737

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	27,628	27,628	3.70	0.45	—	27,854
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	1,594	1,594	0.21	0.03	—	1,607
undefined	—	—	—	—	—	—	—	—	—	—	—	—	16.8	16.8	< 0.005	< 0.005	—	17.0
Total	—	—	—	—	—	—	—	—	—	—	—	—	29,238	29,238	3.91	0.47	—	29,477
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	27,628	27,628	3.70	0.45	—	27,854
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	1,594	1,594	0.21	0.03	—	1,607
undefined	—	—	—	—	—	—	—	—	—	—	—	—	16.8	16.8	< 0.005	< 0.005	—	17.0
Total	—	—	—	—	—	—	—	—	—	—	—	—	29,238	29,238	3.91	0.47	—	29,477
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	4,574	4,574	0.61	0.07	—	4,612
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	264	264	0.04	< 0.005	—	266
undefined	—	—	—	—	—	—	—	—	—	—	—	—	1.99	1.99	< 0.005	< 0.005	—	2.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	4,840	4,840	0.65	0.08	—	4,880

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	1.29	0.65	11.8	9.87	0.07	0.89	—	0.89	0.89	—	0.89	—	14,021	14,021	1.24	0.03	—	14,060
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	1.29	0.65	11.8	9.87	0.07	0.89	—	0.89	0.89	—	0.89	—	14,021	14,021	1.24	0.03	—	14,060
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	1.29	0.65	11.8	9.87	0.07	0.89	—	0.89	0.89	—	0.89	—	14,021	14,021	1.24	0.03	—	14,060
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	1.29	0.65	11.8	9.87	0.07	0.89	—	0.89	0.89	—	0.89	—	14,021	14,021	1.24	0.03	—	14,060
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.24	0.12	2.14	1.80	0.01	0.16	—	0.16	0.16	—	0.16	—	2,321	2,321	0.21	< 0.005	—	2,328
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.24	0.12	2.14	1.80	0.01	0.16	—	0.16	0.16	—	0.16	—	2,321	2,321	0.21	< 0.005	—	2,328

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Consum Products	29.0	29.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	5.44	5.44	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	10.4	9.63	0.49	58.6	< 0.005	0.10	—	0.10	0.08	—	0.08	—	241	241	0.01	< 0.005	—	242
Total	44.9	44.1	0.49	58.6	< 0.005	0.10	—	0.10	0.08	—	0.08	—	241	241	0.01	< 0.005	—	242
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	29.0	29.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	5.44	5.44	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	34.5	34.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	5.30	5.30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.99	0.99	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	1.41	1.30	0.07	7.91	< 0.005	0.01	—	0.01	0.01	—	0.01	—	29.5	29.5	< 0.005	< 0.005	—	29.6
Total	7.70	7.59	0.07	7.91	< 0.005	0.01	—	0.01	0.01	—	0.01	—	29.5	29.5	< 0.005	< 0.005	—	29.6

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	1,410	2,383	3,793	145	3.47	—	8,452
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1,410	2,383	3,793	145	3.47	—	8,452
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	1,410	2,383	3,793	145	3.47	—	8,452
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1,410	2,383	3,793	145	3.47	—	8,452
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	233	395	628	24.0	0.58	—	1,399
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	233	395	628	24.0	0.58	—	1,399

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	900	0.00	900	90.0	0.00	—	3,149
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	900	0.00	900	90.0	0.00	—	3,149
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	900	0.00	900	90.0	0.00	—	3,149
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	900	0.00	900	90.0	0.00	—	3,149
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	149	0.00	149	14.9	0.00	—	521
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	149	0.00	149	14.9	0.00	—	521

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	351	351
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	351	351
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	351	351
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	351	351
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	58.0	58.0
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	58.0	58.0

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Aerial Lifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Skid Steer Loaders	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Aerial Lifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Skid Steer Loaders	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Aerial Lifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Skid Steer Loaders	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Emergency	3.63	3.30	9.23	8.42	0.02	0.49	0.00	0.49	0.49	0.00	0.49	0.00	1,690	1,690	0.07	0.01	0.00	1,696
Fire Pump	1.81	1.65	4.61	4.21	0.01	0.24	0.00	0.24	0.24	0.00	0.24	0.00	844	844	0.03	0.01	0.00	847
Process Boiler	7.76	3.88	0.00	69.2	0.42	5.36	0.00	5.36	5.36	0.00	5.36	0.00	84,707	84,707	1.62	1.02	0.00	85,051
Total	13.2	8.83	13.8	81.8	0.45	6.09	0.00	6.09	6.09	0.00	6.09	0.00	87,241	87,241	1.73	1.04	0.00	87,593
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	3.63	3.30	9.23	8.42	0.02	0.49	0.00	0.49	0.49	0.00	0.49	0.00	1,690	1,690	0.07	0.01	0.00	1,696
Fire Pump	1.81	1.65	4.61	4.21	0.01	0.24	0.00	0.24	0.24	0.00	0.24	0.00	844	844	0.03	0.01	0.00	847
Process Boiler	7.76	3.88	0.00	69.2	0.42	5.36	0.00	5.36	5.36	0.00	5.36	0.00	84,707	84,707	1.62	1.02	0.00	85,051
Total	13.2	8.83	13.8	81.8	0.45	6.09	0.00	6.09	6.09	0.00	6.09	0.00	87,241	87,241	1.73	1.04	0.00	87,593
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.09	0.08	0.23	0.21	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	38.3	38.3	< 0.005	< 0.005	0.00	38.5
Fire Pump	0.05	0.04	0.12	0.11	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	19.1	19.1	< 0.005	< 0.005	0.00	19.2
Process Boiler	1.35	0.67	0.00	12.0	0.07	0.93	0.00	0.93	0.93	0.00	0.93	0.00	13,323	13,323	0.26	0.16	0.00	13,377
Total	1.48	0.80	0.35	12.3	0.07	0.95	0.00	0.95	0.95	0.00	0.95	0.00	13,381	13,381	0.26	0.16	0.00	13,435

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipm Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
General Heavy Industry	1,010	1,657	1,306	417,839	20,574	33,742	26,609	8,510,854
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	2,020,172	673,391	161,614

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	270

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
General Heavy Industry	40,907,700	247	0.0330	0.0040	43,749,646
Parking Lot	2,359,559	247	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
General Heavy Industry	735,947,628	13,028,987
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
General Heavy Industry	1,670	—
Parking Lot	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
General Heavy Industry	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Aerial Lifts	Electric	Average	2.00	1.00	63.0	0.31
Skid Steer Loaders	Electric	Average	2.00	1.00	71.0	0.37

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
Emergency Generator	Diesel	3.00	1.00	50.0	671	0.73
Fire Pump	Diesel	3.00	1.00	50.0	335	0.73

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)
Boiler - CNG (5–75 MMBTU)	CNG	3.00	10.0	240	83,220

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	32.8	annual days of extreme heat
Extreme Precipitation	0.00	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.19	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	11.6
AQ-PM	19.1
AQ-DPM	9.09
Drinking Water	30.6

Lead Risk Housing	50.8
Pesticides	90.5
Toxic Releases	7.58
Traffic	3.06
Effect Indicators	—
CleanUp Sites	74.2
Groundwater	77.9
Haz Waste Facilities/Generators	93.2
Impaired Water Bodies	100.0
Solid Waste	86.5
Sensitive Population	—
Asthma	87.6
Cardio-vascular	83.2
Low Birth Weights	26.9
Socioeconomic Factor Indicators	—
Education	82.7
Housing	51.4
Linguistic	88.8
Poverty	94.9
Unemployment	99.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	16.66880534
Employed	7.173104068
Median HI	5.299627871

Education	—
Bachelor's or higher	5.017323239
High school enrollment	16.8741178
Preschool enrollment	68.89516233
Transportation	—
Auto Access	18.40112922
Active commuting	51.10997049
Social	—
2-parent households	13.28114975
Voting	16.79712563
Neighborhood	—
Alcohol availability	70.25535737
Park access	33.85089183
Retail density	4.311561658
Supermarket access	49.58295907
Tree canopy	0.782753753
Housing	—
Homeownership	38.3036058
Housing habitability	30.96368536
Low-inc homeowner severe housing cost burden	26.76761196
Low-inc renter severe housing cost burden	52.89362248
Uncrowded housing	38.58591043
Health Outcomes	—
Insured adults	21.00603105
Arthritis	0.0
Asthma ER Admissions	30.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0

Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	41.7
Cognitively Disabled	50.3
Physically Disabled	19.5
Heart Attack ER Admissions	46.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	54.3
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	14.1
Elderly	42.0
English Speaking	18.7
Foreign-born	65.3
Outdoor Workers	5.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	85.8

Traffic Density	4.9
Traffic Access	23.0
Other Indices	—
Hardship	92.9
Other Decision Support	—
2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	82.0
Healthy Places Index Score for Project Location (b)	11.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Land use data are based on applicant-provided buildout assumptions.
Operations: Vehicle Data	Custom trip rates are provided by the applicant.

Operations: Landscape Equipment	Assumed 270 summer days for desert region.
Operations: Off-Road Equipment	Assumed 2 aerial lifts and 2 skid steer loaders each operating 1 hour per day as part of project operations.
Operations: Emergency Generators and Fire Pumps	Assumed 3 back-up generators and 3 fire pumps operating 1 hour/day and 50 hours/year for maintenance and testing.
Operations: Road Dust	All roads used by future developments projects within the Specific Plan Area would be required to be paved. Per ICAPCD guidance a value of 85% paved is assumed in the modeling to account for the high levels of entrained dust generated from vehicle travel on paved roadways in the region.
Operations: Water and Waste Water	Water data are based on applicant-provided calculations for the land use.

Lithium Valley Operation - Phase 1 - Intermodal Rail Hub Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Lithium Valley Operation - Phase 1 - Intermodal Rail Hub
Operational Year	2035
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	4.80
Location	33.18829759139308, -115.6026869228474
County	Imperial
City	Unincorporated
Air District	Imperial County APCD
Air Basin	Salton Sea
TAZ	5600
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Unrefrigerated Warehouse-Rail	758	1000sqft	278	757,509	378,755	—	—	—
Parking Lot	3,788	1000sqft	87.0	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	32.2	31.0	13.2	96.8	0.19	0.68	2,425	2,425	0.66	243	244	421	37,631	38,052	45.1	0.95	20.2	39,481
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	25.7	25.0	13.5	43.6	0.17	0.62	2,425	2,425	0.62	243	244	421	35,527	35,948	45.1	0.97	0.52	37,365
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	28.7	27.7	9.59	71.3	0.17	0.46	2,393	2,393	0.44	240	241	421	35,643	36,064	45.0	0.96	8.72	37,483
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	5.23	5.06	1.75	13.0	0.03	0.08	437	437	0.08	43.9	43.9	69.7	5,901	5,971	7.45	0.16	1.44	6,206

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	4.26	3.88	4.47	56.4	0.16	0.09	2,425	2,425	0.08	243	244	—	16,278	16,278	0.32	0.58	20.2	16,480

Area	25.7	25.2	0.28	32.9	< 0.005	0.06	—	0.06	0.04	—	0.04	—	135	135	0.01	< 0.005	—	136
Energy	0.43	0.21	3.88	3.26	0.02	0.30	—	0.30	0.30	—	0.30	—	20,315	20,315	2.51	0.26	—	20,456
Water	—	—	—	—	—	—	—	—	—	—	—	37.3	64.2	101	3.83	0.09	—	225
Waste	—	—	—	—	—	—	—	—	—	—	—	384	0.00	384	38.4	0.00	—	1,343
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	1.80	1.64	4.59	4.18	0.01	0.24	0.00	0.24	0.24	0.00	0.24	0.00	840	840	0.03	0.01	0.00	842
Total	32.2	31.0	13.2	96.8	0.19	0.68	2,425	2,425	0.66	243	244	421	37,631	38,052	45.1	0.95	20.2	39,481
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	3.65	3.28	5.05	36.2	0.14	0.09	2,425	2,425	0.08	243	244	—	14,309	14,309	0.33	0.61	0.52	14,499
Area	19.8	19.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.43	0.21	3.88	3.26	0.02	0.30	—	0.30	0.30	—	0.30	—	20,315	20,315	2.51	0.26	—	20,456
Water	—	—	—	—	—	—	—	—	—	—	—	37.3	64.2	101	3.83	0.09	—	225
Waste	—	—	—	—	—	—	—	—	—	—	—	384	0.00	384	38.4	0.00	—	1,343
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	1.80	1.64	4.59	4.18	0.01	0.24	0.00	0.24	0.24	0.00	0.24	0.00	840	840	0.03	0.01	0.00	842
Total	25.7	25.0	13.5	43.6	0.17	0.62	2,425	2,425	0.62	243	244	421	35,527	35,948	45.1	0.97	0.52	37,365
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	3.83	3.45	4.88	43.1	0.15	0.09	2,393	2,393	0.08	240	240	—	15,117	15,117	0.32	0.60	8.72	15,313
Area	24.2	23.8	0.21	24.4	< 0.005	0.04	—	0.04	0.03	—	0.03	—	100	100	< 0.005	< 0.005	—	101
Energy	0.43	0.21	3.88	3.26	0.02	0.30	—	0.30	0.30	—	0.30	—	20,247	20,247	2.50	0.26	—	20,387
Water	—	—	—	—	—	—	—	—	—	—	—	37.3	64.2	101	3.83	0.09	—	225
Waste	—	—	—	—	—	—	—	—	—	—	—	384	0.00	384	38.4	0.00	—	1,343
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Stationa	0.25	0.22	0.63	0.57	< 0.005	0.03	0.00	0.03	0.03	0.00	0.03	0.00	115	115	< 0.005	< 0.005	0.00	115
Total	28.7	27.7	9.59	71.3	0.17	0.46	2,393	2,393	0.44	240	241	421	35,643	36,064	45.0	0.96	8.72	37,483
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.70	0.63	0.89	7.87	0.03	0.02	437	437	0.02	43.9	43.9	—	2,503	2,503	0.05	0.10	1.44	2,535
Area	4.41	4.35	0.04	4.45	< 0.005	0.01	—	0.01	0.01	—	0.01	—	16.6	16.6	< 0.005	< 0.005	—	16.7
Energy	0.08	0.04	0.71	0.60	< 0.005	0.05	—	0.05	0.05	—	0.05	—	3,352	3,352	0.41	0.04	—	3,375
Water	—	—	—	—	—	—	—	—	—	—	—	6.18	10.6	16.8	0.63	0.02	—	37.2
Waste	—	—	—	—	—	—	—	—	—	—	—	63.5	0.00	63.5	6.35	0.00	—	222
Off-Roa d	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationa ry	0.05	0.04	0.11	0.10	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	19.0	19.0	< 0.005	< 0.005	0.00	19.1
Total	5.23	5.06	1.75	13.0	0.03	0.08	437	437	0.08	43.9	43.9	69.7	5,901	5,971	7.45	0.16	1.44	6,206

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrig erated Wareho use-Rail	4.26	3.88	4.47	56.4	0.16	0.09	2,425	2,425	0.08	243	244	—	16,278	16,278	0.32	0.58	20.2	16,480
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	4.26	3.88	4.47	56.4	0.16	0.09	2,425	2,425	0.08	243	244	—	16,278	16,278	0.32	0.58	20.2	16,480

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-Rail	3.65	3.28	5.05	36.2	0.14	0.09	2,425	2,425	0.08	243	244	—	14,309	14,309	0.33	0.61	0.52	14,499
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	3.65	3.28	5.05	36.2	0.14	0.09	2,425	2,425	0.08	243	244	—	14,309	14,309	0.33	0.61	0.52	14,499
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-Rail	0.70	0.63	0.89	7.87	0.03	0.02	437	437	0.02	43.9	43.9	—	2,503	2,503	0.05	0.10	1.44	2,535
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.70	0.63	0.89	7.87	0.03	0.02	437	437	0.02	43.9	43.9	—	2,503	2,503	0.05	0.10	1.44	2,535

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	—	5,737	5,737	0.77	0.09	—	5,784
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	2,241	2,241	0.30	0.04	—	2,259

undefined	—	—	—	—	—	—	—	—	—	—	—	—	7,703	7,703	1.03	0.12	—	7,766
Total	—	—	—	—	—	—	—	—	—	—	—	—	15,681	15,681	2.10	0.25	—	15,809
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	—	5,737	5,737	0.77	0.09	—	5,784
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	2,241	2,241	0.30	0.04	—	2,259
undefined	—	—	—	—	—	—	—	—	—	—	—	—	7,703	7,703	1.03	0.12	—	7,766
Total	—	—	—	—	—	—	—	—	—	—	—	—	15,681	15,681	2.10	0.25	—	15,809
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	—	950	950	0.13	0.02	—	958
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	371	371	0.05	0.01	—	374
undefined	—	—	—	—	—	—	—	—	—	—	—	—	1,264	1,264	0.17	0.02	—	1,274
Total	—	—	—	—	—	—	—	—	—	—	—	—	2,585	2,585	0.35	0.04	—	2,606

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unrefrigerated	0.43	0.21	3.88	3.26	0.02	0.30	—	0.30	0.30	—	0.30	—	4,634	4,634	0.41	0.01	—	4,646
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.43	0.21	3.88	3.26	0.02	0.30	—	0.30	0.30	—	0.30	—	4,634	4,634	0.41	0.01	—	4,646
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-Rail	0.43	0.21	3.88	3.26	0.02	0.30	—	0.30	0.30	—	0.30	—	4,634	4,634	0.41	0.01	—	4,646
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.43	0.21	3.88	3.26	0.02	0.30	—	0.30	0.30	—	0.30	—	4,634	4,634	0.41	0.01	—	4,646
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-Rail	0.08	0.04	0.71	0.60	< 0.005	0.05	—	0.05	0.05	—	0.05	—	767	767	0.07	< 0.005	—	769
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.08	0.04	0.71	0.60	< 0.005	0.05	—	0.05	0.05	—	0.05	—	767	767	0.07	< 0.005	—	769

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Consumer Product	16.5	16.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	3.32	3.32	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	5.87	5.42	0.28	32.9	< 0.005	0.06	—	0.06	0.04	—	0.04	—	135	135	0.01	< 0.005	—	136
Total	25.7	25.2	0.28	32.9	< 0.005	0.06	—	0.06	0.04	—	0.04	—	135	135	0.01	< 0.005	—	136
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	16.5	16.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	3.32	3.32	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	19.8	19.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	3.01	3.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.61	0.61	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.79	0.73	0.04	4.45	< 0.005	0.01	—	0.01	0.01	—	0.01	—	16.6	16.6	< 0.005	< 0.005	—	16.7
Total	4.41	4.35	0.04	4.45	< 0.005	0.01	—	0.01	0.01	—	0.01	—	16.6	16.6	< 0.005	< 0.005	—	16.7

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	37.3	64.2	101	3.83	0.09	—	225
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	37.3	64.2	101	3.83	0.09	—	225
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	37.3	64.2	101	3.83	0.09	—	225
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	37.3	64.2	101	3.83	0.09	—	225
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	6.18	10.6	16.8	0.63	0.02	—	37.2
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	6.18	10.6	16.8	0.63	0.02	—	37.2

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	384	0.00	384	38.4	0.00	—	1,343
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	384	0.00	384	38.4	0.00	—	1,343
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	384	0.00	384	38.4	0.00	—	1,343
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	384	0.00	384	38.4	0.00	—	1,343
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	63.5	0.00	63.5	6.35	0.00	—	222
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	63.5	0.00	63.5	6.35	0.00	—	222

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Welders	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Air Compressors	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Construction Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Rough Terrain Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Material Handling Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Crawler Tractors	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Generator Sets	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Sweepers/Scrubbers	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Cranes	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Tractors/Loaders/Backhoes	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other General Industrial Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Welders	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Air Compressors	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Construction Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Rough Terrain Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Material Handling Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Crawler Tractors	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Generator Sets	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Sweepers/Scrubbers	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Cranes	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Tractors/Loaders/Backhoes	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other General Industrial Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Welders	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Air Compressors	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Construction Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Rough Terrain Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Other Material Handling Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Crawler Tractors	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Generator Sets	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Sweepers/Scrubbers	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Cranes	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Tractors/Loaders/Backhoes	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other General Industrial Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Emergency Generator	1.80	1.64	4.59	4.18	0.01	0.24	0.00	0.24	0.24	0.00	0.24	0.00	840	840	0.03	0.01	0.00	842
Total	1.80	1.64	4.59	4.18	0.01	0.24	0.00	0.24	0.24	0.00	0.24	0.00	840	840	0.03	0.01	0.00	842
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	1.80	1.64	4.59	4.18	0.01	0.24	0.00	0.24	0.24	0.00	0.24	0.00	840	840	0.03	0.01	0.00	842
Total	1.80	1.64	4.59	4.18	0.01	0.24	0.00	0.24	0.24	0.00	0.24	0.00	840	840	0.03	0.01	0.00	842
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.05	0.04	0.11	0.10	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	19.0	19.0	< 0.005	< 0.005	0.00	19.1
Total	0.05	0.04	0.11	0.10	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	19.0	19.0	< 0.005	< 0.005	0.00	19.1

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Unrefrigerated Warehouse-Rail	1,061	1,061	1,061	387,087	21,601	21,601	21,601	7,884,481
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	1,136,264	378,755	227,253

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	270

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Unrefrigerated Warehouse-Rail	8,495,020	247	0.0330	0.0040	14,458,037
Parking Lot	3,317,894	247	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Unrefrigerated Warehouse-Rail	19,470,942	861,769
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Unrefrigerated Warehouse-Rail	712	—
Parking Lot	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Welders	Electric	Average	2.00	8.00	46.0	0.45
Air Compressors	Electric	Average	2.00	8.00	37.0	0.48
Other Construction Equipment	Electric	Average	2.00	8.00	160	0.43
Forklifts	Electric	Average	91.0	8.00	200	0.20
Rough Terrain Forklifts	Electric	Average	3.00	8.00	200	0.40
Other Material Handling Equipment	Electric	Average	2.00	8.00	136	0.59
Crawler Tractors	Electric	Average	2.00	8.00	250	0.39
Generator Sets	Electric	Average	2.00	8.00	200	0.74
Sweepers/Scrubbers	Electric	Average	2.00	8.00	60.0	0.68
Cranes	Electric	Average	2.00	8.00	367	0.29
Tractors/Loaders/Backhoes	Electric	Average	2.00	8.00	158	0.55
Other General Industrial Equipment	Electric	Average	2.00	8.00	35.0	0.34

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
Emergency Generator	Diesel	2.00	1.00	50.0	500	0.73

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	32.8	annual days of extreme heat
Extreme Precipitation	0.00	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.19	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	11.6
AQ-PM	19.1

AQ-DPM	9.09
Drinking Water	30.6
Lead Risk Housing	50.8
Pesticides	90.5
Toxic Releases	7.58
Traffic	3.06
Effect Indicators	—
CleanUp Sites	74.2
Groundwater	77.9
Haz Waste Facilities/Generators	93.2
Impaired Water Bodies	100.0
Solid Waste	86.5
Sensitive Population	—
Asthma	87.6
Cardio-vascular	83.2
Low Birth Weights	26.9
Socioeconomic Factor Indicators	—
Education	82.7
Housing	51.4
Linguistic	88.8
Poverty	94.9
Unemployment	99.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	16.66880534

Employed	7.173104068
Median HI	5.299627871
Education	—
Bachelor's or higher	5.017323239
High school enrollment	16.8741178
Preschool enrollment	68.89516233
Transportation	—
Auto Access	18.40112922
Active commuting	51.10997049
Social	—
2-parent households	13.28114975
Voting	16.79712563
Neighborhood	—
Alcohol availability	70.25535737
Park access	33.85089183
Retail density	4.311561658
Supermarket access	49.58295907
Tree canopy	0.782753753
Housing	—
Homeownership	38.3036058
Housing habitability	30.96368536
Low-inc homeowner severe housing cost burden	26.76761196
Low-inc renter severe housing cost burden	52.89362248
Uncrowded housing	38.58591043
Health Outcomes	—
Insured adults	21.00603105
Arthritis	0.0
Asthma ER Admissions	30.1

High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	41.7
Cognitively Disabled	50.3
Physically Disabled	19.5
Heart Attack ER Admissions	46.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	54.3
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	14.1
Elderly	42.0
English Speaking	18.7
Foreign-born	65.3
Outdoor Workers	5.4

Climate Change Adaptive Capacity	—
Impervious Surface Cover	85.8
Traffic Density	4.9
Traffic Access	23.0
Other Indices	—
Hardship	92.9
Other Decision Support	—
2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	82.0
Healthy Places Index Score for Project Location (b)	11.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification

Land Use	Land use data are based on applicant-provided buildout assumptions.
Operations: Vehicle Data	Trip rates are based on ITE Land Use Code 154.
Operations: Landscape Equipment	Assumed 270 summer days for desert region.
Operations: Road Dust	85% of roads assumed to be paved based on ICAPCD guidance.
Operations: Off-Road Equipment	other construction equipment = rail car wheel change machine rough terrain forklifts = yard trucks other material handling equipment = side pick crawler tractors = yard tractors
Operations: Water and Waste Water	Water data are based on applicant-provided calculations for the land use

Lithium Valley Operation - Phase 1 - Logistics and Warehousing Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Lithium Valley Operation - Phase 1 - Logistics and Warehousing
Operational Year	2035
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	4.80
Location	33.18829759139308, -115.6026869228474
County	Imperial
City	Unincorporated
Air District	Imperial County APCD
Air Basin	Salton Sea
TAZ	5600
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Unrefrigerated Warehouse-No Rail	622	1000sqft	229	622,420	311,210	—	—	—

Unrefrigerated Warehouse-Rail	236	1000sqft	86.7	236,090	118,045	—	—	—
Refrigerated Warehouse-No Rail	83.8	1000sqft	30.8	83,781	41,890	—	—	—
Refrigerated Warehouse-Rail	67.7	1000sqft	24.9	67,721	33,861	—	—	—
Parking Lot	5,050	1000sqft	116	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	40.0	38.5	44.7	115	0.56	1.51	4,615	4,617	1.46	464	465	561	95,641	96,203	61.9	6.38	4,109	103,760
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	31.8	30.9	48.0	46.6	0.53	1.44	4,615	4,617	1.40	464	465	561	93,048	93,610	61.9	6.41	4,039	101,106
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	36.1	34.9	43.7	84.0	0.54	1.29	4,555	4,556	1.23	458	459	561	93,446	94,007	61.8	6.39	4,069	101,527
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	6.60	6.37	7.97	15.3	0.10	0.23	831	831	0.23	83.6	83.8	92.9	15,471	15,564	10.2	1.06	674	16,809

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	3.39	2.91	34.6	62.4	0.52	0.80	4,615	4,616	0.77	464	465	—	53,935	53,935	0.41	5.68	71.7	55,709
Area	34.3	33.7	0.37	43.9	< 0.005	0.08	—	0.08	0.06	—	0.06	—	181	181	0.01	< 0.005	—	181
Energy	0.57	0.28	5.16	4.34	0.03	0.39	—	0.39	0.39	—	0.39	—	40,600	40,600	5.16	0.57	—	40,899
Water	—	—	—	—	—	—	—	—	—	—	—	49.7	85.6	135	5.11	0.12	—	300
Waste	—	—	—	—	—	—	—	—	—	—	—	512	0.00	512	51.1	0.00	—	1,790
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4,038	4,038
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	1.80	1.64	4.59	4.18	0.01	0.24	0.00	0.24	0.24	0.00	0.24	0.00	840	840	0.03	0.01	0.00	842
Total	40.0	38.5	44.7	115	0.56	1.51	4,615	4,617	1.46	464	465	561	95,641	96,203	61.9	6.38	4,109	103,760
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	2.98	2.52	38.2	38.1	0.49	0.80	4,615	4,616	0.77	464	465	—	51,523	51,523	0.41	5.71	1.86	53,237
Area	26.4	26.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.57	0.28	5.16	4.34	0.03	0.39	—	0.39	0.39	—	0.39	—	40,600	40,600	5.16	0.57	—	40,899
Water	—	—	—	—	—	—	—	—	—	—	—	49.7	85.6	135	5.11	0.12	—	300
Waste	—	—	—	—	—	—	—	—	—	—	—	512	0.00	512	51.1	0.00	—	1,790
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4,038	4,038
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	1.80	1.64	4.59	4.18	0.01	0.24	0.00	0.24	0.24	0.00	0.24	0.00	840	840	0.03	0.01	0.00	842
Total	31.8	30.9	48.0	46.6	0.53	1.44	4,615	4,617	1.40	464	465	561	93,048	93,610	61.9	6.41	4,039	101,106

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	3.10	2.63	37.6	46.6	0.50	0.80	4,555	4,555	0.77	458	459	—	52,511	52,511	0.41	5.70	30.9	54,251
Area	32.2	31.8	0.27	32.5	< 0.005	0.06	—	0.06	0.04	—	0.04	—	134	134	0.01	< 0.005	—	134
Energy	0.57	0.28	5.16	4.34	0.03	0.39	—	0.39	0.39	—	0.39	—	40,600	40,600	5.16	0.57	—	40,899
Water	—	—	—	—	—	—	—	—	—	—	—	49.7	85.6	135	5.11	0.12	—	300
Waste	—	—	—	—	—	—	—	—	—	—	—	512	0.00	512	51.1	0.00	—	1,790
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4,038	4,038
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	0.25	0.22	0.63	0.57	< 0.005	0.03	0.00	0.03	0.03	0.00	0.03	0.00	115	115	< 0.005	< 0.005	0.00	115
Total	36.1	34.9	43.7	84.0	0.54	1.29	4,555	4,556	1.23	458	459	561	93,446	94,007	61.8	6.39	4,069	101,527
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.57	0.48	6.86	8.50	0.09	0.15	831	831	0.14	83.6	83.7	—	8,694	8,694	0.07	0.94	5.12	8,982
Area	5.88	5.80	0.05	5.93	< 0.005	0.01	—	0.01	0.01	—	0.01	—	22.1	22.1	< 0.005	< 0.005	—	22.2
Energy	0.10	0.05	0.94	0.79	0.01	0.07	—	0.07	0.07	—	0.07	—	6,722	6,722	0.85	0.09	—	6,771
Water	—	—	—	—	—	—	—	—	—	—	—	8.24	14.2	22.4	0.85	0.02	—	49.6
Waste	—	—	—	—	—	—	—	—	—	—	—	84.7	0.00	84.7	8.47	0.00	—	296
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	668	668
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	0.05	0.04	0.11	0.10	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	19.0	19.0	< 0.005	< 0.005	0.00	19.1
Total	6.60	6.37	7.97	15.3	0.10	0.23	831	831	0.23	83.6	83.8	92.9	15,471	15,564	10.2	1.06	674	16,809

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	2.05	1.89	1.68	47.5	0.14	0.04	2,382	2,382	0.03	239	239	—	14,433	14,433	0.16	0.22	15.1	14,517
Unrefrigerated Warehouse-Rail	0.83	0.60	25.4	6.62	0.28	0.59	1,486	1,487	0.57	150	150	—	29,187	29,187	0.18	4.22	42.4	30,491
Refrigerated Warehouse-No Rail	0.28	0.25	0.23	6.39	0.02	< 0.005	321	321	< 0.005	32.2	32.2	—	1,943	1,943	0.02	0.03	2.03	1,954
Refrigerated Warehouse-Rail	0.24	0.17	7.28	1.90	0.08	0.17	426	426	0.16	42.9	43.1	—	8,372	8,372	0.05	1.21	12.2	8,746
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	3.39	2.91	34.6	62.4	0.52	0.80	4,615	4,616	0.77	464	465	—	53,935	53,935	0.41	5.68	71.7	55,709
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	1.74	1.59	1.91	26.0	0.12	0.04	2,382	2,382	0.03	239	239	—	12,295	12,295	0.16	0.24	0.39	12,371

Unrefrigerated	0.79	0.56	28.0	6.68	0.28	0.59	1,486	1,487	0.57	150	150	—	29,198	29,198	0.18	4.23	1.10	30,463
Refrigerated Warehouse-No Rail	0.23	0.21	0.26	3.50	0.02	< 0.005	321	321	< 0.005	32.2	32.2	—	1,655	1,655	0.02	0.03	0.05	1,665
Refrigerated Warehouse-Rail	0.23	0.16	8.04	1.92	0.08	0.17	426	426	0.16	42.9	43.1	—	8,375	8,375	0.05	1.21	0.32	8,738
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	2.98	2.52	38.2	38.1	0.49	0.80	4,615	4,616	0.77	464	465	—	51,523	51,523	0.41	5.71	1.86	53,237
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.33	0.30	0.33	6.11	0.02	0.01	429	429	0.01	43.1	43.1	—	2,181	2,181	0.03	0.04	1.08	2,194
Unrefrigerated Warehouse-Rail	0.15	0.11	5.04	1.21	0.05	0.11	268	268	0.10	27.0	27.1	—	4,833	4,833	0.03	0.70	3.03	5,045
Refrigerated Warehouse-No Rail	0.04	0.04	0.04	0.82	< 0.005	< 0.005	57.7	57.7	< 0.005	5.80	5.80	—	294	294	< 0.005	0.01	0.14	295
Refrigerated Warehouse-Rail	0.04	0.03	1.45	0.35	0.01	0.03	76.8	76.8	0.03	7.74	7.77	—	1,386	1,386	0.01	0.20	0.87	1,447
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.57	0.48	6.86	8.50	0.09	0.15	831	831	0.14	83.6	83.7	—	8,694	8,694	0.07	0.94	5.12	8,982

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	4,714	4,714	0.63	0.08	—	4,753
Unrefrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	—	1,788	1,788	0.24	0.03	—	1,803
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	1,209	1,209	0.16	0.02	—	1,218
Refrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	—	977	977	0.13	0.02	—	985
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	2,988	2,988	0.40	0.05	—	3,012
undefined	—	—	—	—	—	—	—	—	—	—	—	—	22,765	22,765	3.05	0.37	—	22,951
Total	—	—	—	—	—	—	—	—	—	—	—	—	34,440	34,440	4.61	0.56	—	34,722
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unrefrigerated	—	—	—	—	—	—	—	—	—	—	—	—	4,714	4,714	0.63	0.08	—	4,753
Unrefrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	—	1,788	1,788	0.24	0.03	—	1,803
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	1,209	1,209	0.16	0.02	—	1,218
Refrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	—	977	977	0.13	0.02	—	985
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	2,988	2,988	0.40	0.05	—	3,012
undefined	—	—	—	—	—	—	—	—	—	—	—	—	22,765	22,765	3.05	0.37	—	22,951
Total	—	—	—	—	—	—	—	—	—	—	—	—	34,440	34,440	4.61	0.56	—	34,722
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	780	780	0.10	0.01	—	787
Unrefrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	—	296	296	0.04	< 0.005	—	298
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	200	200	0.03	< 0.005	—	202

Refrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	—	162	162	0.02	< 0.005	—	163
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	495	495	0.07	0.01	—	499
undefined	—	—	—	—	—	—	—	—	—	—	—	—	3,769	3,769	0.50	0.06	—	3,800
Total	—	—	—	—	—	—	—	—	—	—	—	—	5,702	5,702	0.76	0.09	—	5,749

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.35	0.18	3.19	2.68	0.02	0.24	—	0.24	0.24	—	0.24	—	3,807	3,807	0.34	0.01	—	3,818
Unrefrigerated Warehouse-Rail	0.13	0.07	1.21	1.02	0.01	0.09	—	0.09	0.09	—	0.09	—	1,444	1,444	0.13	< 0.005	—	1,448
Refrigerated Warehouse-No Rail	0.05	0.02	0.42	0.35	< 0.005	0.03	—	0.03	0.03	—	0.03	—	503	503	0.04	< 0.005	—	504
Refrigerated Warehouse-Rail	0.04	0.02	0.34	0.29	< 0.005	0.03	—	0.03	0.03	—	0.03	—	406	406	0.04	< 0.005	—	407
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Total	0.57	0.28	5.16	4.34	0.03	0.39	—	0.39	0.39	—	0.39	—	6,160	6,160	0.55	0.01	—	6,178
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.35	0.18	3.19	2.68	0.02	0.24	—	0.24	0.24	—	0.24	—	3,807	3,807	0.34	0.01	—	3,818
Unrefrigerated Warehouse-Rail	0.13	0.07	1.21	1.02	0.01	0.09	—	0.09	0.09	—	0.09	—	1,444	1,444	0.13	< 0.005	—	1,448
Refrigerated Warehouse-No Rail	0.05	0.02	0.42	0.35	< 0.005	0.03	—	0.03	0.03	—	0.03	—	503	503	0.04	< 0.005	—	504
Refrigerated Warehouse-Rail	0.04	0.02	0.34	0.29	< 0.005	0.03	—	0.03	0.03	—	0.03	—	406	406	0.04	< 0.005	—	407
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.57	0.28	5.16	4.34	0.03	0.39	—	0.39	0.39	—	0.39	—	6,160	6,160	0.55	0.01	—	6,178
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.06	0.03	0.58	0.49	< 0.005	0.04	—	0.04	0.04	—	0.04	—	630	630	0.06	< 0.005	—	632
Unrefrigerated Warehouse-Rail	0.02	0.01	0.22	0.19	< 0.005	0.02	—	0.02	0.02	—	0.02	—	239	239	0.02	< 0.005	—	240

Refrigerated Warehouse-No	0.01	< 0.005	0.08	0.06	< 0.005	0.01	—	0.01	0.01	—	0.01	—	83.2	83.2	0.01	< 0.005	—	83.5
Refrigerated Warehouse-Rail	0.01	< 0.005	0.06	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	67.3	67.3	0.01	< 0.005	—	67.5
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.10	0.05	0.94	0.79	0.01	0.07	—	0.07	0.07	—	0.07	—	1,020	1,020	0.09	< 0.005	—	1,023

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	22.0	22.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	4.43	4.43	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	7.82	7.22	0.37	43.9	< 0.005	0.08	—	0.08	0.06	—	0.06	—	181	181	0.01	< 0.005	—	181
Total	34.3	33.7	0.37	43.9	< 0.005	0.08	—	0.08	0.06	—	0.06	—	181	181	0.01	< 0.005	—	181
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Consum Products	22.0	22.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	4.43	4.43	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	26.4	26.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	4.02	4.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.81	0.81	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	1.06	0.97	0.05	5.93	< 0.005	0.01	—	0.01	0.01	—	0.01	—	22.1	22.1	< 0.005	< 0.005	—	22.2
Total	5.88	5.80	0.05	5.93	< 0.005	0.01	—	0.01	0.01	—	0.01	—	22.1	22.1	< 0.005	< 0.005	—	22.2

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	30.7	52.7	83.4	3.15	0.08	—	185

Unrefrig Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	11.6	20.0	31.6	1.20	0.03	—	70.0
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	4.13	7.10	11.2	0.42	0.01	—	24.9
Refrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	3.34	5.74	9.07	0.34	0.01	—	20.1
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	49.7	85.6	135	5.11	0.12	—	300
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	30.7	52.7	83.4	3.15	0.08	—	185
Unrefrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	11.6	20.0	31.6	1.20	0.03	—	70.0
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	4.13	7.10	11.2	0.42	0.01	—	24.9
Refrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	3.34	5.74	9.07	0.34	0.01	—	20.1
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	49.7	85.6	135	5.11	0.12	—	300

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	5.08	8.73	13.8	0.52	0.01	—	30.6
Unrefrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	1.93	3.31	5.24	0.20	< 0.005	—	11.6
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	0.68	1.18	1.86	0.07	< 0.005	—	4.12
Refrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	0.55	0.95	1.50	0.06	< 0.005	—	3.33
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	8.24	14.2	22.4	0.85	0.02	—	49.6

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	315	0.00	315	31.5	0.00	—	1,103

Unrefrig Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	120	0.00	120	12.0	0.00	—	418
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	42.4	0.00	42.4	4.24	0.00	—	148
Refrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	34.3	0.00	34.3	3.43	0.00	—	120
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	512	0.00	512	51.1	0.00	—	1,790
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	315	0.00	315	31.5	0.00	—	1,103
Unrefrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	120	0.00	120	12.0	0.00	—	418
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	42.4	0.00	42.4	4.24	0.00	—	148
Refrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	34.3	0.00	34.3	3.43	0.00	—	120
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	512	0.00	512	51.1	0.00	—	1,790

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	52.2	0.00	52.2	5.22	0.00	—	183
Unrefrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	19.8	0.00	19.8	1.98	0.00	—	69.3
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	7.03	0.00	7.03	0.70	0.00	—	24.6
Refrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	5.68	0.00	5.68	0.57	0.00	—	19.9
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	84.7	0.00	84.7	8.47	0.00	—	296

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2,233	2,233

Refriger Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,805	1,805
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4,038	4,038
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2,233	2,233
Refrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,805	1,805
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4,038	4,038
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	370	370
Refrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	299	299
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	668	668

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Rough Terrain Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Rough Terrain Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Rough Terrain Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Emergency	1.80	1.64	4.59	4.18	0.01	0.24	0.00	0.24	0.24	0.00	0.24	0.00	840	840	0.03	0.01	0.00	842
Total	1.80	1.64	4.59	4.18	0.01	0.24	0.00	0.24	0.24	0.00	0.24	0.00	840	840	0.03	0.01	0.00	842
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	1.80	1.64	4.59	4.18	0.01	0.24	0.00	0.24	0.24	0.00	0.24	0.00	840	840	0.03	0.01	0.00	842
Total	1.80	1.64	4.59	4.18	0.01	0.24	0.00	0.24	0.24	0.00	0.24	0.00	840	840	0.03	0.01	0.00	842
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.05	0.04	0.11	0.10	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	19.0	19.0	< 0.005	< 0.005	0.00	19.1
Total	0.05	0.04	0.11	0.10	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	19.0	19.0	< 0.005	< 0.005	0.00	19.1

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Unrefrigerated Warehouse-No Rail	871	871	871	318,057	21,222	21,222	21,222	7,745,875
Unrefrigerated Warehouse-Rail	331	331	331	120,642	13,221	13,221	13,221	4,825,687
Refrigerated Warehouse-No Rail	117	117	117	42,812	2,857	2,857	2,857	1,042,629
Refrigerated Warehouse-Rail	94.8	94.8	94.8	34,606	3,792	3,792	3,792	1,384,224
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	1,515,018	505,006	303,004

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	270

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Unrefrigerated Warehouse-No Rail	6,980,076	247	0.0330	0.0040	11,879,689
Unrefrigerated Warehouse-Rail	2,647,611	247	0.0330	0.0040	4,506,082
Refrigerated Warehouse-No Rail	1,789,446	247	0.0330	0.0040	1,568,616
Refrigerated Warehouse-Rail	1,446,426	247	0.0330	0.0040	1,267,927
Parking Lot	4,423,852	247	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Unrefrigerated Warehouse-No Rail	15,998,624	708,087

Unrefrigerated Warehouse-Rail	6,068,444	268,585
Refrigerated Warehouse-No Rail	2,153,486	95,312
Refrigerated Warehouse-Rail	1,740,702	77,042
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Unrefrigerated Warehouse-No Rail	585	—
Unrefrigerated Warehouse-Rail	222	—
Refrigerated Warehouse-No Rail	78.8	—
Refrigerated Warehouse-Rail	63.7	—
Parking Lot	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Refrigerated Warehouse-No Rail	Cold storage	R-404A	3,922	7.50	7.50	7.50	25.0
Refrigerated Warehouse-Rail	Cold storage	R-404A	3,922	7.50	7.50	7.50	25.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Forklifts	Electric	Average	121	24.0	200	0.20

Rough Terrain Forklifts	Electric	Average	4.00	24.0	200	0.40

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
Emergency Generator	Diesel	2.00	1.00	50.0	500	0.73

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	32.8	annual days of extreme heat
Extreme Precipitation	0.00	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.19	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A

Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	11.6
AQ-PM	19.1
AQ-DPM	9.09
Drinking Water	30.6
Lead Risk Housing	50.8
Pesticides	90.5
Toxic Releases	7.58
Traffic	3.06
Effect Indicators	—
CleanUp Sites	74.2
Groundwater	77.9
Haz Waste Facilities/Generators	93.2
Impaired Water Bodies	100.0
Solid Waste	86.5
Sensitive Population	—
Asthma	87.6
Cardio-vascular	83.2
Low Birth Weights	26.9
Socioeconomic Factor Indicators	—
Education	82.7
Housing	51.4
Linguistic	88.8
Poverty	94.9
Unemployment	99.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	16.66880534
Employed	7.173104068
Median HI	5.299627871
Education	—
Bachelor's or higher	5.017323239
High school enrollment	16.8741178
Preschool enrollment	68.89516233
Transportation	—
Auto Access	18.40112922
Active commuting	51.10997049
Social	—
2-parent households	13.28114975
Voting	16.79712563
Neighborhood	—
Alcohol availability	70.25535737
Park access	33.85089183
Retail density	4.311561658
Supermarket access	49.58295907
Tree canopy	0.782753753
Housing	—
Homeownership	38.3036058
Housing habitability	30.96368536
Low-inc homeowner severe housing cost burden	26.76761196
Low-inc renter severe housing cost burden	52.89362248

Uncrowded housing	38.58591043
Health Outcomes	—
Insured adults	21.00603105
Arthritis	0.0
Asthma ER Admissions	30.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	41.7
Cognitively Disabled	50.3
Physically Disabled	19.5
Heart Attack ER Admissions	46.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	54.3
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0

Children	14.1
Elderly	42.0
English Speaking	18.7
Foreign-born	65.3
Outdoor Workers	5.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	85.8
Traffic Density	4.9
Traffic Access	23.0
Other Indices	—
Hardship	92.9
Other Decision Support	—
2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	82.0
Healthy Places Index Score for Project Location (b)	11.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Land use data are based on applicant-provided buildout assumptions.
Operations: Vehicle Data	Trip rates are based on ITE Land Use Code 154.
Operations: Landscape Equipment	Assumed 270 summer days for desert region.
Operations: Off-Road Equipment	Assumed forklifts and yard trucks (modeled as rough terrain forklifts) as part of project operations.
Operations: Road Dust	All roads used by future developments projects within the Specific Plan Area would be required to be paved. Per ICAPCD guidance a value of 85% paved is assumed in the modeling to account for the high levels of entrained dust generated from vehicle travel on paved roadways in the region.
Operations: Fleet Mix	Fleet mix adjusted for passenger vehicles (no-rail land uses) and trucks (rail land uses).
Operations: Emergency Generators and Fire Pumps	Assumed 2 back-up generators each operating 1 hour/day and 50 hours/year for maintenance and testing.
Operations: Water and Waste Water	Water data are based on applicant-provided calculations for the land use.

Lithium Valley Operation - Phase 1 - Manufacturing of Green Industrial Equipment Detailed Report

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7.2. Healthy Places Index Scores

7.3. Overall Health & Equity Scores

7.4. Health & Equity Measures

7.5. Evaluation Scorecard

7.6. Health & Equity Custom Measures

8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Lithium Valley Operation - Phase 1 - Manufacturing of Green Industrial Equipment
Operational Year	2035
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	4.80
Location	33.18829759139308, -115.6026869228474
County	Imperial
City	Unincorporated
Air District	Imperial County APCD
Air Basin	Salton Sea
TAZ	5600
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Manufacturing	719	1000sqft	440	719,073	359,536	—	—	—
Parking Lot	3,595	1000sqft	82.5	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	48.4	45.5	32.3	335	0.88	1.11	12,758	12,759	1.07	1,281	1,282	676	115,954	116,630	73.4	3.93	293	119,929
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	39.6	37.2	35.1	198	0.78	1.06	12,758	12,759	1.03	1,281	1,282	676	105,465	106,141	73.4	4.07	190	109,380
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	37.7	35.7	24.6	186	0.58	0.85	8,729	8,730	0.82	877	877	676	83,601	84,277	72.7	3.02	219	87,214
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	6.88	6.51	4.49	33.9	0.11	0.16	1,593	1,593	0.15	160	160	112	13,841	13,953	12.0	0.50	36.3	14,439

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	22.4	20.4	23.5	297	0.84	0.46	12,758	12,759	0.43	1,281	1,282	—	85,646	85,646	1.69	3.07	106	86,710

Area	24.4	24.0	0.26	31.3	< 0.005	0.06	—	0.06	0.04	—	0.04	—	129	129	0.01	< 0.005	—	129
Energy	0.69	0.35	6.27	5.27	0.04	0.48	—	0.48	0.48	—	0.48	—	29,423	29,423	3.60	0.37	—	29,623
Water	—	—	—	—	—	—	—	—	—	—	—	195	336	531	20.1	0.48	—	1,177
Waste	—	—	—	—	—	—	—	—	—	—	—	481	0.00	481	48.0	0.00	—	1,681
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	187	187
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	0.90	0.82	2.29	2.09	< 0.005	0.12	0.00	0.12	0.12	0.00	0.12	0.00	420	420	0.02	< 0.005	0.00	421
Total	48.4	45.5	32.3	335	0.88	1.11	12,758	12,759	1.07	1,281	1,282	676	115,954	116,630	73.4	3.93	293	119,929
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	19.2	17.3	26.6	190	0.74	0.46	12,758	12,759	0.43	1,281	1,282	—	75,286	75,286	1.72	3.22	2.76	76,290
Area	18.8	18.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.69	0.35	6.27	5.27	0.04	0.48	—	0.48	0.48	—	0.48	—	29,423	29,423	3.60	0.37	—	29,623
Water	—	—	—	—	—	—	—	—	—	—	—	195	336	531	20.1	0.48	—	1,177
Waste	—	—	—	—	—	—	—	—	—	—	—	481	0.00	481	48.0	0.00	—	1,681
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	187	187
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	0.90	0.82	2.29	2.09	< 0.005	0.12	0.00	0.12	0.12	0.00	0.12	0.00	420	420	0.02	< 0.005	0.00	421
Total	39.6	37.2	35.1	198	0.78	1.06	12,758	12,759	1.03	1,281	1,282	676	105,465	106,141	73.4	4.07	190	109,380
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	14.0	12.6	17.8	157	0.54	0.32	8,729	8,730	0.30	877	877	—	55,145	55,145	1.17	2.19	31.8	55,859
Area	22.9	22.6	0.19	23.1	< 0.005	0.04	—	0.04	0.03	—	0.03	—	95.1	95.1	< 0.005	< 0.005	—	95.5
Energy	0.69	0.35	6.27	5.27	0.04	0.48	—	0.48	0.48	—	0.48	—	27,968	27,968	3.40	0.35	—	28,156
Water	—	—	—	—	—	—	—	—	—	—	—	195	336	531	20.1	0.48	—	1,177
Waste	—	—	—	—	—	—	—	—	—	—	—	481	0.00	481	48.0	0.00	—	1,681

Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	187	187
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	0.12	0.11	0.31	0.29	< 0.005	0.02	0.00	0.02	0.02	0.00	0.02	0.00	57.5	57.5	< 0.005	< 0.005	0.00	57.7
Total	37.7	35.7	24.6	186	0.58	0.85	8,729	8,730	0.82	877	877	676	83,601	84,277	72.7	3.02	219	87,214
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	2.55	2.30	3.25	28.7	0.10	0.06	1,593	1,593	0.05	160	160	—	9,130	9,130	0.19	0.36	5.27	9,248
Area	4.19	4.13	0.04	4.22	< 0.005	0.01	—	0.01	0.01	—	0.01	—	15.8	15.8	< 0.005	< 0.005	—	15.8
Energy	0.13	0.06	1.15	0.96	0.01	0.09	—	0.09	0.09	—	0.09	—	4,630	4,630	0.56	0.06	—	4,662
Water	—	—	—	—	—	—	—	—	—	—	—	32.3	55.6	88.0	3.32	0.08	—	195
Waste	—	—	—	—	—	—	—	—	—	—	—	79.6	0.00	79.6	7.95	0.00	—	278
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	31.0	31.0
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	0.02	0.02	0.06	0.05	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	9.52	9.52	< 0.005	< 0.005	0.00	9.55
Total	6.88	6.51	4.49	33.9	0.11	0.16	1,593	1,593	0.15	160	160	112	13,841	13,953	12.0	0.50	36.3	14,439

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Manufacturing	22.4	20.4	23.5	297	0.84	0.46	12,758	12,759	0.43	1,281	1,282	—	85,646	85,646	1.69	3.07	106	86,710
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	22.4	20.4	23.5	297	0.84	0.46	12,758	12,759	0.43	1,281	1,282	—	85,646	85,646	1.69	3.07	106	86,710
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	19.2	17.3	26.6	190	0.74	0.46	12,758	12,759	0.43	1,281	1,282	—	75,286	75,286	1.72	3.22	2.76	76,290
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	19.2	17.3	26.6	190	0.74	0.46	12,758	12,759	0.43	1,281	1,282	—	75,286	75,286	1.72	3.22	2.76	76,290
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	2.55	2.30	3.25	28.7	0.10	0.06	1,593	1,593	0.05	160	160	—	9,130	9,130	0.19	0.36	5.27	9,248
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	2.55	2.30	3.25	28.7	0.10	0.06	1,593	1,593	0.05	160	160	—	9,130	9,130	0.19	0.36	5.27	9,248

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	—	14,751	14,751	1.97	0.24	—	14,872
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	2,127	2,127	0.28	0.03	—	2,145

undefine	—	—	—	—	—	—	—	—	—	—	—	—	5,059	5,059	0.68	0.08	—	5,100
Total	—	—	—	—	—	—	—	—	—	—	—	—	21,937	21,937	2.94	0.36	—	22,116
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	—	14,751	14,751	1.97	0.24	—	14,872
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	2,127	2,127	0.28	0.03	—	2,145
undefined	—	—	—	—	—	—	—	—	—	—	—	—	5,059	5,059	0.68	0.08	—	5,100
Total	—	—	—	—	—	—	—	—	—	—	—	—	21,937	21,937	2.94	0.36	—	22,116
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	—	2,442	2,442	0.33	0.04	—	2,462
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	352	352	0.05	0.01	—	355
undefined	—	—	—	—	—	—	—	—	—	—	—	—	597	597	0.08	0.01	—	601
Total	—	—	—	—	—	—	—	—	—	—	—	—	3,391	3,391	0.45	0.06	—	3,419

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	0.69	0.35	6.27	5.27	0.04	0.48	—	0.48	0.48	—	0.48	—	7,486	7,486	0.66	0.01	—	7,507
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.69	0.35	6.27	5.27	0.04	0.48	—	0.48	0.48	—	0.48	—	7,486	7,486	0.66	0.01	—	7,507

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	0.69	0.35	6.27	5.27	0.04	0.48	—	0.48	0.48	—	0.48	—	7,486	7,486	0.66	0.01	—	7,507
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.69	0.35	6.27	5.27	0.04	0.48	—	0.48	0.48	—	0.48	—	7,486	7,486	0.66	0.01	—	7,507
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	0.13	0.06	1.15	0.96	0.01	0.09	—	0.09	0.09	—	0.09	—	1,239	1,239	0.11	< 0.005	—	1,243
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.13	0.06	1.15	0.96	0.01	0.09	—	0.09	0.09	—	0.09	—	1,239	1,239	0.11	< 0.005	—	1,243

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	15.7	15.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	3.15	3.15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	5.57	5.14	0.26	31.3	< 0.005	0.06	—	0.06	0.04	—	0.04	—	129	129	0.01	< 0.005	—	129

Total	24.4	24.0	0.26	31.3	< 0.005	0.06	—	0.06	0.04	—	0.04	—	129	129	0.01	< 0.005	—	129
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	15.7	15.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	3.15	3.15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	18.8	18.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	2.86	2.86	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.58	0.58	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.75	0.69	0.04	4.22	< 0.005	0.01	—	0.01	0.01	—	0.01	—	15.8	15.8	< 0.005	< 0.005	—	15.8
Total	4.19	4.13	0.04	4.22	< 0.005	0.01	—	0.01	0.01	—	0.01	—	15.8	15.8	< 0.005	< 0.005	—	15.8

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	195	336	531	20.1	0.48	—	1,177
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	195	336	531	20.1	0.48	—	1,177
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	195	336	531	20.1	0.48	—	1,177
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	195	336	531	20.1	0.48	—	1,177
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	32.3	55.6	88.0	3.32	0.08	—	195
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	32.3	55.6	88.0	3.32	0.08	—	195

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	481	0.00	481	48.0	0.00	—	1,681

Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	481	0.00	481	48.0	0.00	—	1,681
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	481	0.00	481	48.0	0.00	—	1,681
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	481	0.00	481	48.0	0.00	—	1,681
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	79.6	0.00	79.6	7.95	0.00	—	278
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	79.6	0.00	79.6	7.95	0.00	—	278

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	187	187
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	187	187
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Manufac	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	187	187
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	187	187
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	31.0	31.0
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	31.0	31.0

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.90	0.82	2.29	2.09	< 0.005	0.12	0.00	0.12	0.12	0.00	0.12	0.00	420	420	0.02	< 0.005	0.00	421
Total	0.90	0.82	2.29	2.09	< 0.005	0.12	0.00	0.12	0.12	0.00	0.12	0.00	420	420	0.02	< 0.005	0.00	421
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.90	0.82	2.29	2.09	< 0.005	0.12	0.00	0.12	0.12	0.00	0.12	0.00	420	420	0.02	< 0.005	0.00	421
Total	0.90	0.82	2.29	2.09	< 0.005	0.12	0.00	0.12	0.12	0.00	0.12	0.00	420	420	0.02	< 0.005	0.00	421
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.02	0.02	0.06	0.05	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	9.52	9.52	< 0.005	< 0.005	0.00	9.55
Total	0.02	0.02	0.06	0.05	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	9.52	9.52	< 0.005	< 0.005	0.00	9.55

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Manufacturing	3,416	5,580	4,422	1,412,043	69,571	113,658	90,077	28,761,558
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	1,078,610	359,537	215,722

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	270

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Manufacturing	21,841,430	247	0.0330	0.0040	23,358,801
Parking Lot	3,149,535	247	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Manufacturing	101,960,014	4,512,671
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Manufacturing	892	—
Parking Lot	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Manufacturing	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Forklifts	Electric	Average	86.0	8.00	200	0.20

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
Emergency Generator	Diesel	1.00	1.00	50.0	500	0.73

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	32.8	annual days of extreme heat
Extreme Precipitation	0.00	annual days with precipitation above 20 mm

Sea Level Rise	—	meters of inundation depth
Wildfire	0.19	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A

Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	11.6
AQ-PM	19.1
AQ-DPM	9.09
Drinking Water	30.6
Lead Risk Housing	50.8
Pesticides	90.5
Toxic Releases	7.58
Traffic	3.06
Effect Indicators	—

CleanUp Sites	74.2
Groundwater	77.9
Haz Waste Facilities/Generators	93.2
Impaired Water Bodies	100.0
Solid Waste	86.5
Sensitive Population	—
Asthma	87.6
Cardio-vascular	83.2
Low Birth Weights	26.9
Socioeconomic Factor Indicators	—
Education	82.7
Housing	51.4
Linguistic	88.8
Poverty	94.9
Unemployment	99.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	16.66880534
Employed	7.173104068
Median HI	5.299627871
Education	—
Bachelor's or higher	5.017323239
High school enrollment	16.8741178
Preschool enrollment	68.89516233
Transportation	—

Auto Access	18.40112922
Active commuting	51.10997049
Social	—
2-parent households	13.28114975
Voting	16.79712563
Neighborhood	—
Alcohol availability	70.25535737
Park access	33.85089183
Retail density	4.311561658
Supermarket access	49.58295907
Tree canopy	0.782753753
Housing	—
Homeownership	38.3036058
Housing habitability	30.96368536
Low-inc homeowner severe housing cost burden	26.76761196
Low-inc renter severe housing cost burden	52.89362248
Uncrowded housing	38.58591043
Health Outcomes	—
Insured adults	21.00603105
Arthritis	0.0
Asthma ER Admissions	30.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	41.7

Cognitively Disabled	50.3
Physically Disabled	19.5
Heart Attack ER Admissions	46.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	54.3
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	14.1
Elderly	42.0
English Speaking	18.7
Foreign-born	65.3
Outdoor Workers	5.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	85.8
Traffic Density	4.9
Traffic Access	23.0
Other Indices	—
Hardship	92.9
Other Decision Support	—

2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	82.0
Healthy Places Index Score for Project Location (b)	11.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Land use data are based on applicant-provided buildout assumptions.
Operations: Vehicle Data	Trip rates are based on ITE Land Use Code 140.
Operations: Landscape Equipment	Assumed 270 summer days for desert region.
Operations: Emergency Generators and Fire Pumps	Assumed back-up generator as part of project operations.
Operations: Road Dust	All roads used by future developments projects within the Specific Plan Area would be required to be paved. Per ICAPCD guidance a value of 85% paved is assumed in the modeling to account for the high levels of entrained dust generated from vehicle travel on paved roadways in the region

Operations: Off-Road Equipment	Assumed electric forklifts as part of project operations.
Operations: Water and Waste Water	Water data are based on applicant-provided calculations for the land use.

Lithium Valley Operation - Phase 1 - Mineral Recovery, Processing, and Production Detailed Report

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1.1. Basic Project Information

Data Field	Value
Project Name	Lithium Valley Operation - Phase 1 - Mineral Recovery, Processing, and Production
Operational Year	2035
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	4.80
Location	33.18829759139308, -115.6026869228474
County	Imperial
City	Unincorporated
Air District	Imperial County APCD
Air Basin	Salton Sea
TAZ	5600
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
General Heavy Industry	2,917	1000sqft	1,721	2,916,824	583,365	—	—	—
Parking Lot	5,834	1000sqft	134	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	126	121	90.1	367	0.75	4.05	8,203	8,207	3.98	824	828	5,420	160,817	166,237	564	11.7	828	184,641
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	102	98.0	91.0	171	0.68	3.82	8,203	8,207	3.81	824	827	5,420	153,634	159,055	564	11.7	761	177,418
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	105	101	44.3	220	0.51	2.52	5,595	5,597	2.47	562	564	5,420	136,174	141,594	564	11.1	780	159,755
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	19.1	18.4	8.08	40.1	0.09	0.46	1,021	1,021	0.45	103	103	897	22,545	23,443	93.3	1.83	129	26,449

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	14.4	13.1	15.1	191	0.54	0.30	8,203	8,203	0.28	824	824	—	55,067	55,067	1.09	1.97	68.3	55,751

Area	97.3	95.5	1.07	127	0.01	0.23	—	0.23	0.17	—	0.17	—	522	522	0.02	< 0.005	—	524
Energy	2.80	1.40	25.5	21.4	0.15	1.93	—	1.93	1.93	—	1.93	—	93,822	93,822	11.2	1.09	—	94,426
Water	—	—	—	—	—	—	—	—	—	—	—	3,471	5,866	9,337	357	8.55	—	20,803
Waste	—	—	—	—	—	—	—	—	—	—	—	1,949	0.00	1,949	195	0.00	—	6,820
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	759	759
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	11.9	10.8	48.4	27.6	0.05	1.59	0.00	1.59	1.59	0.00	1.59	0.00	5,541	5,541	0.22	0.04	0.00	5,559
Total	126	121	90.1	367	0.75	4.05	8,203	8,207	3.98	824	828	5,420	160,817	166,237	564	11.7	828	184,641
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	12.4	11.1	17.1	122	0.48	0.30	8,203	8,203	0.28	824	824	—	48,406	48,406	1.11	2.07	1.77	49,051
Area	74.7	74.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	2.80	1.40	25.5	21.4	0.15	1.93	—	1.93	1.93	—	1.93	—	93,822	93,822	11.2	1.09	—	94,426
Water	—	—	—	—	—	—	—	—	—	—	—	3,471	5,866	9,337	357	8.55	—	20,803
Waste	—	—	—	—	—	—	—	—	—	—	—	1,949	0.00	1,949	195	0.00	—	6,820
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	759	759
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	11.9	10.8	48.4	27.6	0.05	1.59	0.00	1.59	1.59	0.00	1.59	0.00	5,541	5,541	0.22	0.04	0.00	5,559
Total	102	98.0	91.0	171	0.68	3.82	8,203	8,207	3.81	824	827	5,420	153,634	159,055	564	11.7	761	177,418
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	8.95	8.07	11.4	101	0.35	0.20	5,595	5,595	0.19	562	562	—	35,341	35,341	0.75	1.40	20.4	35,799
Area	91.4	90.1	0.79	93.8	0.01	0.17	—	0.17	0.13	—	0.13	—	386	386	0.02	< 0.005	—	387
Energy	2.80	1.40	25.5	21.4	0.15	1.93	—	1.93	1.93	—	1.93	—	93,822	93,822	11.2	1.09	—	94,426
Water	—	—	—	—	—	—	—	—	—	—	—	3,471	5,866	9,337	357	8.55	—	20,803
Waste	—	—	—	—	—	—	—	—	—	—	—	1,949	0.00	1,949	195	0.00	—	6,820

Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	759	759
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	1.63	1.48	6.64	3.78	0.01	0.22	0.00	0.22	0.22	0.00	0.22	0.00	759	759	0.03	0.01	0.00	762
Total	105	101	44.3	220	0.51	2.52	5,595	5,597	2.47	562	564	5,420	136,174	141,594	564	11.1	780	159,755
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.63	1.47	2.08	18.4	0.06	0.04	1,021	1,021	0.04	103	103	—	5,851	5,851	0.12	0.23	3.38	5,927
Area	16.7	16.4	0.14	17.1	< 0.005	0.03	—	0.03	0.02	—	0.02	—	63.9	63.9	< 0.005	< 0.005	—	64.1
Energy	0.51	0.26	4.64	3.90	0.03	0.35	—	0.35	0.35	—	0.35	—	15,533	15,533	1.85	0.18	—	15,633
Water	—	—	—	—	—	—	—	—	—	—	—	575	971	1,546	59.1	1.42	—	3,444
Waste	—	—	—	—	—	—	—	—	—	—	—	323	0.00	323	32.3	0.00	—	1,129
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	126	126
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	0.30	0.27	1.21	0.69	< 0.005	0.04	0.00	0.04	0.04	0.00	0.04	0.00	126	126	0.01	< 0.005	0.00	126
Total	19.1	18.4	8.08	40.1	0.09	0.46	1,021	1,021	0.45	103	103	897	22,545	23,443	93.3	1.83	129	26,449

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	14.4	13.1	15.1	191	0.54	0.30	8,203	8,203	0.28	824	824	—	55,067	55,067	1.09	1.97	68.3	55,751
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	14.4	13.1	15.1	191	0.54	0.30	8,203	8,203	0.28	824	824	—	55,067	55,067	1.09	1.97	68.3	55,751
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	12.4	11.1	17.1	122	0.48	0.30	8,203	8,203	0.28	824	824	—	48,406	48,406	1.11	2.07	1.77	49,051
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	12.4	11.1	17.1	122	0.48	0.30	8,203	8,203	0.28	824	824	—	48,406	48,406	1.11	2.07	1.77	49,051
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	1.63	1.47	2.08	18.4	0.06	0.04	1,021	1,021	0.04	103	103	—	5,851	5,851	0.12	0.23	3.38	5,927
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	1.63	1.47	2.08	18.4	0.06	0.04	1,021	1,021	0.04	103	103	—	5,851	5,851	0.12	0.23	3.38	5,927

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	59,835	59,835	8.01	0.97	—	60,325
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	3,451	3,451	0.46	0.06	—	3,480
undefined	—	—	—	—	—	—	—	—	—	—	—	—	169	169	0.02	< 0.005	—	170
Total	—	—	—	—	—	—	—	—	—	—	—	—	63,456	63,456	8.49	1.03	—	63,975
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	59,835	59,835	8.01	0.97	—	60,325
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	3,451	3,451	0.46	0.06	—	3,480
undefined	—	—	—	—	—	—	—	—	—	—	—	—	169	169	0.02	< 0.005	—	170
Total	—	—	—	—	—	—	—	—	—	—	—	—	63,456	63,456	8.49	1.03	—	63,975
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	9,906	9,906	1.33	0.16	—	9,988
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	571	571	0.08	0.01	—	576
undefined	—	—	—	—	—	—	—	—	—	—	—	—	28.0	28.0	< 0.005	< 0.005	—	28.2
Total	—	—	—	—	—	—	—	—	—	—	—	—	10,506	10,506	1.41	0.17	—	10,592

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	2.80	1.40	25.5	21.4	0.15	1.93	—	1.93	1.93	—	1.93	—	30,367	30,367	2.69	0.06	—	30,451
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	2.80	1.40	25.5	21.4	0.15	1.93	—	1.93	1.93	—	1.93	—	30,367	30,367	2.69	0.06	—	30,451
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	2.80	1.40	25.5	21.4	0.15	1.93	—	1.93	1.93	—	1.93	—	30,367	30,367	2.69	0.06	—	30,451
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	2.80	1.40	25.5	21.4	0.15	1.93	—	1.93	1.93	—	1.93	—	30,367	30,367	2.69	0.06	—	30,451
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.51	0.26	4.64	3.90	0.03	0.35	—	0.35	0.35	—	0.35	—	5,028	5,028	0.44	0.01	—	5,041
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.51	0.26	4.64	3.90	0.03	0.35	—	0.35	0.35	—	0.35	—	5,028	5,028	0.44	0.01	—	5,041

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Consum Products	62.9	62.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	11.8	11.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	22.6	20.9	1.07	127	0.01	0.23	—	0.23	0.17	—	0.17	—	522	522	0.02	< 0.005	—	524
Total	97.3	95.5	1.07	127	0.01	0.23	—	0.23	0.17	—	0.17	—	522	522	0.02	< 0.005	—	524
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	62.9	62.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	11.8	11.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	74.7	74.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	11.5	11.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	2.15	2.15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	3.05	2.82	0.14	17.1	< 0.005	0.03	—	0.03	0.02	—	0.02	—	63.9	63.9	< 0.005	< 0.005	—	64.1
Total	16.7	16.4	0.14	17.1	< 0.005	0.03	—	0.03	0.02	—	0.02	—	63.9	63.9	< 0.005	< 0.005	—	64.1

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	3,471	5,866	9,337	357	8.55	—	20,803
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	3,471	5,866	9,337	357	8.55	—	20,803
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	3,471	5,866	9,337	357	8.55	—	20,803
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	3,471	5,866	9,337	357	8.55	—	20,803
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	575	971	1,546	59.1	1.42	—	3,444
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	575	971	1,546	59.1	1.42	—	3,444

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	1,949	0.00	1,949	195	0.00	—	6,820
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1,949	0.00	1,949	195	0.00	—	6,820
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	1,949	0.00	1,949	195	0.00	—	6,820
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1,949	0.00	1,949	195	0.00	—	6,820
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	323	0.00	323	32.3	0.00	—	1,129
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	323	0.00	323	32.3	0.00	—	1,129

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	759	759
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	759	759
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	759	759
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	759	759
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	126	126
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	126	126

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	11.9	10.8	48.4	27.6	0.05	1.59	0.00	1.59	1.59	0.00	1.59	0.00	5,541	5,541	0.22	0.04	0.00	5,559
Total	11.9	10.8	48.4	27.6	0.05	1.59	0.00	1.59	1.59	0.00	1.59	0.00	5,541	5,541	0.22	0.04	0.00	5,559
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	11.9	10.8	48.4	27.6	0.05	1.59	0.00	1.59	1.59	0.00	1.59	0.00	5,541	5,541	0.22	0.04	0.00	5,559
Total	11.9	10.8	48.4	27.6	0.05	1.59	0.00	1.59	1.59	0.00	1.59	0.00	5,541	5,541	0.22	0.04	0.00	5,559
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Emerge Generator	0.30	0.27	1.21	0.69	< 0.005	0.04	0.00	0.04	0.04	0.00	0.04	0.00	126	126	0.01	< 0.005	0.00	126
Total	0.30	0.27	1.21	0.69	< 0.005	0.04	0.00	0.04	0.04	0.00	0.04	0.00	126	126	0.01	< 0.005	0.00	126

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
General Heavy Industry	2,188	3,588	2,829	904,945	44,559	73,077	57,630	18,432,589
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	4,375,236	1,458,412	350,019

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	270

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)

General Heavy Industry	88,596,855	247	0.0330	0.0040	94,751,870
Parking Lot	5,110,277	247	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
General Heavy Industry	1,811,412,063	32,068,676
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
General Heavy Industry	3,617	—
Parking Lot	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
General Heavy Industry	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

Forklifts	Electric	Average	7.00	8.00	82.0	0.20

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
Emergency Generator	Diesel	6.00	1.00	50.0	1,100	0.73

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	32.8	annual days of extreme heat
Extreme Precipitation	0.00	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.19	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A

Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	11.6
AQ-PM	19.1
AQ-DPM	9.09
Drinking Water	30.6
Lead Risk Housing	50.8
Pesticides	90.5
Toxic Releases	7.58
Traffic	3.06
Effect Indicators	—
CleanUp Sites	74.2
Groundwater	77.9
Haz Waste Facilities/Generators	93.2
Impaired Water Bodies	100.0
Solid Waste	86.5
Sensitive Population	—
Asthma	87.6
Cardio-vascular	83.2
Low Birth Weights	26.9
Socioeconomic Factor Indicators	—
Education	82.7
Housing	51.4
Linguistic	88.8
Poverty	94.9
Unemployment	99.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	16.66880534
Employed	7.173104068
Median HI	5.299627871
Education	—
Bachelor's or higher	5.017323239
High school enrollment	16.8741178
Preschool enrollment	68.89516233
Transportation	—
Auto Access	18.40112922
Active commuting	51.10997049
Social	—
2-parent households	13.28114975
Voting	16.79712563
Neighborhood	—
Alcohol availability	70.25535737
Park access	33.85089183
Retail density	4.311561658
Supermarket access	49.58295907
Tree canopy	0.782753753
Housing	—
Homeownership	38.3036058
Housing habitability	30.96368536
Low-inc homeowner severe housing cost burden	26.76761196
Low-inc renter severe housing cost burden	52.89362248

Uncrowded housing	38.58591043
Health Outcomes	—
Insured adults	21.00603105
Arthritis	0.0
Asthma ER Admissions	30.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	41.7
Cognitively Disabled	50.3
Physically Disabled	19.5
Heart Attack ER Admissions	46.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	54.3
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0

Children	14.1
Elderly	42.0
English Speaking	18.7
Foreign-born	65.3
Outdoor Workers	5.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	85.8
Traffic Density	4.9
Traffic Access	23.0
Other Indices	—
Hardship	92.9
Other Decision Support	—
2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	82.0
Healthy Places Index Score for Project Location (b)	11.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Land use data are based on applicant-provided buildout assumptions.
Operations: Vehicle Data	Custom trip rates are provided by the applicant.
Operations: Landscape Equipment	Assumed 270 summer days for desert region.
Operations: Emergency Generators and Fire Pumps	Assumed 6 back-up generators operating 1 hour/day and 50 hours/year for maintenance and testing.
Operations: Road Dust	85% of roads assumed to be paved based on ICAPCD guidance.
Operations: Water and Waste Water	Water data are based on applicant-provided calculations for the land use.
Operations: Off-Road Equipment	Assumed 7 forklifts as part of project operations.

Lithium Valley Operation - Phase 1 - Outdoor Storage of Trucks, Trailers, Shipping Containers Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Lithium Valley Operation - Phase 1 - Outdoor Storage of Trucks, Trailers, Shipping Containers
Operational Year	2035
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	4.80
Location	33.18829759139308, -115.6026869228474
County	Imperial
City	Unincorporated
Air District	Imperial County APCD
Air Basin	Salton Sea
TAZ	5600
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Parking Lot	33.4	Acre	33.4	0.00	0.00	484,806	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.47	0.45	0.20	2.49	0.01	< 0.005	107	107	< 0.005	10.7	10.7	0.00	1,666	1,666	0.14	0.04	0.89	1,683
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.44	0.43	0.22	1.59	0.01	< 0.005	107	107	< 0.005	10.7	10.7	0.00	1,580	1,580	0.14	0.04	0.02	1,596
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.45	0.43	0.22	1.90	0.01	< 0.005	105	105	< 0.005	10.6	10.6	0.00	1,615	1,615	0.14	0.04	0.38	1,632
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.08	0.08	0.04	0.35	< 0.005	< 0.005	19.3	19.3	< 0.005	1.93	1.93	0.00	267	267	0.02	0.01	0.06	270

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.19	0.17	0.20	2.49	0.01	< 0.005	107	107	< 0.005	10.7	10.7	—	717	717	0.01	0.03	0.89	726

Area	0.28	0.28	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	860	860	0.12	0.01	—	868
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	88.4	88.4	0.01	< 0.005	—	89.1
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	0.47	0.45	0.20	2.49	0.01	< 0.005	107	107	< 0.005	10.7	10.7	0.00	1,666	1,666	0.14	0.04	0.89	1,683
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.16	0.14	0.22	1.59	0.01	< 0.005	107	107	< 0.005	10.7	10.7	—	631	631	0.01	0.03	0.02	639
Area	0.28	0.28	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	860	860	0.12	0.01	—	868
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	88.4	88.4	0.01	< 0.005	—	89.1
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	0.44	0.43	0.22	1.59	0.01	< 0.005	107	107	< 0.005	10.7	10.7	0.00	1,580	1,580	0.14	0.04	0.02	1,596
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.17	0.15	0.22	1.90	0.01	< 0.005	105	105	< 0.005	10.6	10.6	—	666	666	0.01	0.03	0.38	675
Area	0.28	0.28	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	860	860	0.12	0.01	—	868
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	88.4	88.4	0.01	< 0.005	—	89.1
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	0.45	0.43	0.22	1.90	0.01	< 0.005	105	105	< 0.005	10.6	10.6	0.00	1,615	1,615	0.14	0.04	0.38	1,632
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.03	0.03	0.04	0.35	< 0.005	< 0.005	19.3	19.3	< 0.005	1.93	1.93	—	110	110	< 0.005	< 0.005	0.06	112
Area	0.05	0.05	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	142	142	0.02	< 0.005	—	144
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	14.6	14.6	< 0.005	< 0.005	—	14.8
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	0.08	0.08	0.04	0.35	< 0.005	< 0.005	19.3	19.3	< 0.005	1.93	1.93	0.00	267	267	0.02	0.01	0.06	270

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	0.19	0.17	0.20	2.49	0.01	< 0.005	107	107	< 0.005	10.7	10.7	—	717	717	0.01	0.03	0.89	726
Total	0.19	0.17	0.20	2.49	0.01	< 0.005	107	107	< 0.005	10.7	10.7	—	717	717	0.01	0.03	0.89	726
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	0.16	0.14	0.22	1.59	0.01	< 0.005	107	107	< 0.005	10.7	10.7	—	631	631	0.01	0.03	0.02	639
Total	0.16	0.14	0.22	1.59	0.01	< 0.005	107	107	< 0.005	10.7	10.7	—	631	631	0.01	0.03	0.02	639
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	0.03	0.03	0.04	0.35	< 0.005	< 0.005	19.3	19.3	< 0.005	1.93	1.93	—	110	110	< 0.005	< 0.005	0.06	112
Total	0.03	0.03	0.04	0.35	< 0.005	< 0.005	19.3	19.3	< 0.005	1.93	1.93	—	110	110	< 0.005	< 0.005	0.06	112

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	860	860	0.12	0.01	—	868
Total	—	—	—	—	—	—	—	—	—	—	—	—	860	860	0.12	0.01	—	868
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	860	860	0.12	0.01	—	868
Total	—	—	—	—	—	—	—	—	—	—	—	—	860	860	0.12	0.01	—	868
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	142	142	0.02	< 0.005	—	144
Total	—	—	—	—	—	—	—	—	—	—	—	—	142	142	0.02	< 0.005	—	144

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.11	0.11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.17	0.17	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.28	0.28	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.11	0.11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architectural Coating	0.17	0.17	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.28	0.28	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.02	0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.03	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.05	0.05	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	88.4	88.4	0.01	< 0.005	—	89.1
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	88.4	88.4	0.01	< 0.005	—	89.1
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	88.4	88.4	0.01	< 0.005	—	89.1
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	88.4	88.4	0.01	< 0.005	—	89.1
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	14.6	14.6	< 0.005	< 0.005	—	14.8
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	14.6	14.6	< 0.005	< 0.005	—	14.8

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Parking Lot	46.7	46.7	46.7	17,062	952	952	952	347,538

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	0.00	0.00	87,268

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	270

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Parking Lot	1,274,114	247	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Parking Lot	0.00	40,665,422

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Parking Lot	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	32.8	annual days of extreme heat
Extreme Precipitation	0.00	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.19	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A

Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	11.6
AQ-PM	19.1
AQ-DPM	9.09
Drinking Water	30.6
Lead Risk Housing	50.8
Pesticides	90.5
Toxic Releases	7.58
Traffic	3.06
Effect Indicators	—
CleanUp Sites	74.2
Groundwater	77.9
Haz Waste Facilities/Generators	93.2
Impaired Water Bodies	100.0
Solid Waste	86.5
Sensitive Population	—
Asthma	87.6
Cardio-vascular	83.2
Low Birth Weights	26.9
Socioeconomic Factor Indicators	—
Education	82.7
Housing	51.4
Linguistic	88.8
Poverty	94.9
Unemployment	99.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	16.66880534
Employed	7.173104068
Median HI	5.299627871
Education	—
Bachelor's or higher	5.017323239
High school enrollment	16.8741178
Preschool enrollment	68.89516233
Transportation	—
Auto Access	18.40112922
Active commuting	51.10997049
Social	—
2-parent households	13.28114975
Voting	16.79712563
Neighborhood	—
Alcohol availability	70.25535737
Park access	33.85089183
Retail density	4.311561658
Supermarket access	49.58295907
Tree canopy	0.782753753
Housing	—
Homeownership	38.3036058
Housing habitability	30.96368536
Low-inc homeowner severe housing cost burden	26.76761196
Low-inc renter severe housing cost burden	52.89362248

Uncrowded housing	38.58591043
Health Outcomes	—
Insured adults	21.00603105
Arthritis	0.0
Asthma ER Admissions	30.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	41.7
Cognitively Disabled	50.3
Physically Disabled	19.5
Heart Attack ER Admissions	46.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	54.3
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0

Children	14.1
Elderly	42.0
English Speaking	18.7
Foreign-born	65.3
Outdoor Workers	5.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	85.8
Traffic Density	4.9
Traffic Access	23.0
Other Indices	—
Hardship	92.9
Other Decision Support	—
2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	82.0
Healthy Places Index Score for Project Location (b)	11.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	project-specific information
Operations: Vehicle Data	Trip rates are based on ITE Land Use Code 154.
Operations: Landscape Equipment	Assumed 270 summer days for desert region.
Operations: Road Dust	85% of roads assumed to be paved based on ICAPCD guidance and project narrative.
Operations: Water and Waste Water	Water data are based on applicant-provided calculations for the land use.

Lithium Valley Operation - Phase 1 - Passive Uses Detailed Report

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5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

5.16.2. Process Boilers

5.17. User Defined

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

5.18.2. Sequestration

5.18.2.1. Unmitigated

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

6.2. Initial Climate Risk Scores

6.3. Adjusted Climate Risk Scores

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

7.2. Healthy Places Index Scores

7.3. Overall Health & Equity Scores

7.4. Health & Equity Measures

7.5. Evaluation Scorecard

7.6. Health & Equity Custom Measures

8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Lithium Valley Operation - Phase 1 - Passive Uses
Operational Year	2035
Lead Agency	—
Land Use Scale	Plan/community
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	4.80
Location	33.18829759139308, -115.6026869228474
County	Imperial
City	Unincorporated
Air District	Imperial County APCD
Air Basin	Salton Sea
TAZ	5600
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
City Park	9,205	Acre	9,205	0.00	0.00	0.00	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	427	3,220	3,646	43.1	0.05	0.00	4,739
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	427	3,220	3,646	43.1	0.05	0.00	4,739
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	427	3,220	3,646	43.1	0.05	0.00	4,739
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	70.6	533	604	7.13	0.01	0.00	785

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Area	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	3,220	3,220	0.43	0.05	—	3,246
Waste	—	—	—	—	—	—	—	—	—	—	—	427	0.00	427	42.6	0.00	—	1,493
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	427	3,220	3,646	43.1	0.05	0.00	4,739
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Area	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	3,220	3,220	0.43	0.05	—	3,246
Waste	—	—	—	—	—	—	—	—	—	—	—	427	0.00	427	42.6	0.00	—	1,493
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	427	3,220	3,646	43.1	0.05	0.00	4,739
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Area	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	3,220	3,220	0.43	0.05	—	3,246
Waste	—	—	—	—	—	—	—	—	—	—	—	427	0.00	427	42.6	0.00	—	1,493
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	427	3,220	3,646	43.1	0.05	0.00	4,739
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Area	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	533	533	0.07	0.01	—	537
Waste	—	—	—	—	—	—	—	—	—	—	—	70.6	0.00	70.6	7.06	0.00	—	247
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	70.6	533	604	7.13	0.01	0.00	785

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Consum Products	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	3,220	3,220	0.43	0.05	—	3,246
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	3,220	3,220	0.43	0.05	—	3,246
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	3,220	3,220	0.43	0.05	—	3,246
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	3,220	3,220	0.43	0.05	—	3,246
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	533	533	0.07	0.01	—	537
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	533	533	0.07	0.01	—	537

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	427	0.00	427	42.6	0.00	—	1,493
Total	—	—	—	—	—	—	—	—	—	—	—	427	0.00	427	42.6	0.00	—	1,493
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	427	0.00	427	42.6	0.00	—	1,493
Total	—	—	—	—	—	—	—	—	—	—	—	427	0.00	427	42.6	0.00	—	1,493
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	70.6	0.00	70.6	7.06	0.00	—	247
Total	—	—	—	—	—	—	—	—	—	—	—	70.6	0.00	70.6	7.06	0.00	—	247

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	0.00	0.00	—

5.10.3. Landscape Equipment

Equipment Type	Fuel Type	Number Per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
City Park	0.00	247	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
City Park	0.00	1,481,355,669

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
City Park	792	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	32.8	annual days of extreme heat
Extreme Precipitation	0.00	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.19	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	11.6
AQ-PM	19.1

AQ-DPM	9.09
Drinking Water	30.6
Lead Risk Housing	50.8
Pesticides	90.5
Toxic Releases	7.58
Traffic	3.06
Effect Indicators	—
CleanUp Sites	74.2
Groundwater	77.9
Haz Waste Facilities/Generators	93.2
Impaired Water Bodies	100.0
Solid Waste	86.5
Sensitive Population	—
Asthma	87.6
Cardio-vascular	83.2
Low Birth Weights	26.9
Socioeconomic Factor Indicators	—
Education	82.7
Housing	51.4
Linguistic	88.8
Poverty	94.9
Unemployment	99.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	16.66880534

Employed	7.173104068
Median HI	5.299627871
Education	—
Bachelor's or higher	5.017323239
High school enrollment	16.8741178
Preschool enrollment	68.89516233
Transportation	—
Auto Access	18.40112922
Active commuting	51.10997049
Social	—
2-parent households	13.28114975
Voting	16.79712563
Neighborhood	—
Alcohol availability	70.25535737
Park access	33.85089183
Retail density	4.311561658
Supermarket access	49.58295907
Tree canopy	0.782753753
Housing	—
Homeownership	38.3036058
Housing habitability	30.96368536
Low-inc homeowner severe housing cost burden	26.76761196
Low-inc renter severe housing cost burden	52.89362248
Uncrowded housing	38.58591043
Health Outcomes	—
Insured adults	21.00603105
Arthritis	0.0
Asthma ER Admissions	30.1

High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	41.7
Cognitively Disabled	50.3
Physically Disabled	19.5
Heart Attack ER Admissions	46.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	54.3
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	14.1
Elderly	42.0
English Speaking	18.7
Foreign-born	65.3
Outdoor Workers	5.4

Climate Change Adaptive Capacity	—
Impervious Surface Cover	85.8
Traffic Density	4.9
Traffic Access	23.0
Other Indices	—
Hardship	92.9
Other Decision Support	—
2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	82.0
Healthy Places Index Score for Project Location (b)	11.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification

Operations: Refrigerants	No sources of refrigerants anticipated as part of operations.
Operations: Road Dust	All roads used by future developments projects within the Specific Plan Area would be required to be paved. Per ICAPCD guidance a value of 85% paved is assumed in the modeling to account for the high levels of entrained dust generated from vehicle travel on paved roadways in the region
Operations: Water and Waste Water	Water data are based on applicant-provided calculations for the land use.
Operations: Vehicle Data	Restoration/passive land uses were not modeled to generate trips.

Lithium Valley Operation - Phase 1 - Public Transit Hub Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Lithium Valley Operation - Phase 1 - Public Transit Hub
Operational Year	2035
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	4.80
Location	33.18829759139308, -115.6026869228474
County	Imperial
City	Unincorporated
Air District	Imperial County APCD
Air Basin	Salton Sea
TAZ	5600
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Parking Lot	246	1000sqft	5.64	0.00	0.00	—	—	—
General Office Building	49.2	1000sqft	70.9	49,162	24,581	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	6.62	6.14	5.33	67.6	0.19	0.12	2,810	2,810	0.11	282	282	30.9	20,460	20,491	3.68	0.72	23.5	20,820
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	5.53	5.09	6.00	42.0	0.16	0.11	2,810	2,810	0.11	282	282	30.9	18,170	18,200	3.69	0.75	0.73	18,516
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	6.02	5.55	5.81	51.7	0.17	0.11	2,773	2,773	0.11	278	279	30.9	19,113	19,144	3.68	0.73	10.2	19,465
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.10	1.01	1.06	9.43	0.03	0.02	506	506	0.02	50.8	50.8	5.11	3,164	3,169	0.61	0.12	1.69	3,223

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	4.94	4.49	5.18	65.3	0.19	0.10	2,810	2,810	0.10	282	282	—	18,864	18,864	0.37	0.68	23.4	19,098

Area	1.67	1.64	0.02	2.14	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.79	8.79	< 0.005	< 0.005	—	8.82
Energy	0.02	0.01	0.14	0.12	< 0.005	0.01	—	0.01	0.01	—	0.01	—	1,577	1,577	0.20	0.02	—	1,589
Water	—	—	—	—	—	—	—	—	—	—	—	6.23	10.8	17.0	0.64	0.02	—	37.6
Waste	—	—	—	—	—	—	—	—	—	—	—	24.6	0.00	24.6	2.46	0.00	—	86.2
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.12	0.12
Total	6.62	6.14	5.33	67.6	0.19	0.12	2,810	2,810	0.11	282	282	30.9	20,460	20,491	3.68	0.72	23.5	20,820
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	4.23	3.80	5.85	41.9	0.16	0.10	2,810	2,810	0.10	282	282	—	16,582	16,582	0.38	0.71	0.61	16,803
Area	1.29	1.29	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.02	0.01	0.14	0.12	< 0.005	0.01	—	0.01	0.01	—	0.01	—	1,577	1,577	0.20	0.02	—	1,589
Water	—	—	—	—	—	—	—	—	—	—	—	6.23	10.8	17.0	0.64	0.02	—	37.6
Waste	—	—	—	—	—	—	—	—	—	—	—	24.6	0.00	24.6	2.46	0.00	—	86.2
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.12	0.12
Total	5.53	5.09	6.00	42.0	0.16	0.11	2,810	2,810	0.11	282	282	30.9	18,170	18,200	3.69	0.75	0.73	18,516
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	4.43	4.00	5.65	50.0	0.17	0.10	2,773	2,773	0.10	278	279	—	17,519	17,519	0.37	0.70	10.1	17,746
Area	1.57	1.55	0.01	1.58	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.50	6.50	< 0.005	< 0.005	—	6.53
Energy	0.02	0.01	0.14	0.12	< 0.005	0.01	—	0.01	0.01	—	0.01	—	1,577	1,577	0.20	0.02	—	1,589
Water	—	—	—	—	—	—	—	—	—	—	—	6.23	10.8	17.0	0.64	0.02	—	37.6
Waste	—	—	—	—	—	—	—	—	—	—	—	24.6	0.00	24.6	2.46	0.00	—	86.2
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.12	0.12
Total	6.02	5.55	5.81	51.7	0.17	0.11	2,773	2,773	0.11	278	279	30.9	19,113	19,144	3.68	0.73	10.2	19,465
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.81	0.73	1.03	9.12	0.03	0.02	506	506	0.02	50.8	50.8	—	2,900	2,900	0.06	0.12	1.67	2,938
Area	0.29	0.28	< 0.005	0.29	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.08	1.08	< 0.005	< 0.005	—	1.08
Energy	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	261	261	0.03	< 0.005	—	263

Water	—	—	—	—	—	—	—	—	—	—	—	1.03	1.79	2.82	0.11	< 0.005	—	6.23
Waste	—	—	—	—	—	—	—	—	—	—	—	4.08	0.00	4.08	0.41	0.00	—	14.3
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.02	0.02
Total	1.10	1.01	1.06	9.43	0.03	0.02	506	506	0.02	50.8	50.8	5.11	3,164	3,169	0.61	0.12	1.69	3,223

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
General Office Building	4.94	4.49	5.18	65.3	0.19	0.10	2,810	2,810	0.10	282	282	—	18,864	18,864	0.37	0.68	23.4	19,098
Total	4.94	4.49	5.18	65.3	0.19	0.10	2,810	2,810	0.10	282	282	—	18,864	18,864	0.37	0.68	23.4	19,098
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
General Office Building	4.23	3.80	5.85	41.9	0.16	0.10	2,810	2,810	0.10	282	282	—	16,582	16,582	0.38	0.71	0.61	16,803
Total	4.23	3.80	5.85	41.9	0.16	0.10	2,810	2,810	0.10	282	282	—	16,582	16,582	0.38	0.71	0.61	16,803
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
General Office Building	0.81	0.73	1.03	9.12	0.03	0.02	506	506	0.02	50.8	50.8	—	2,900	2,900	0.06	0.12	1.67	2,938
Total	0.81	0.73	1.03	9.12	0.03	0.02	506	506	0.02	50.8	50.8	—	2,900	2,900	0.06	0.12	1.67	2,938

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	145	145	0.02	< 0.005	—	147
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	1,263	1,263	0.17	0.02	—	1,273
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,408	1,408	0.19	0.02	—	1,420
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	145	145	0.02	< 0.005	—	147
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	1,263	1,263	0.17	0.02	—	1,273
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,408	1,408	0.19	0.02	—	1,420
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	24.1	24.1	< 0.005	< 0.005	—	24.3

General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	209	209	0.03	< 0.005	—	211
Total	—	—	—	—	—	—	—	—	—	—	—	—	233	233	0.03	< 0.005	—	235

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
General Office Building	0.02	0.01	0.14	0.12	< 0.005	0.01	—	0.01	0.01	—	0.01	—	169	169	0.01	< 0.005	—	169
Total	0.02	0.01	0.14	0.12	< 0.005	0.01	—	0.01	0.01	—	0.01	—	169	169	0.01	< 0.005	—	169
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
General Office Building	0.02	0.01	0.14	0.12	< 0.005	0.01	—	0.01	0.01	—	0.01	—	169	169	0.01	< 0.005	—	169
Total	0.02	0.01	0.14	0.12	< 0.005	0.01	—	0.01	0.01	—	0.01	—	169	169	0.01	< 0.005	—	169
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
General Office Building	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	28.0	28.0	< 0.005	< 0.005	—	28.0
Total	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	28.0	28.0	< 0.005	< 0.005	—	28.0

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	1.07	1.07	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.22	0.22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.38	0.35	0.02	2.14	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.79	8.79	< 0.005	< 0.005	—	8.82
Total	1.67	1.64	0.02	2.14	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.79	8.79	< 0.005	< 0.005	—	8.82
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	1.07	1.07	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.22	0.22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	1.29	1.29	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Consumer Product	0.20	0.20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.04	0.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.05	0.05	< 0.005	0.29	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.08	1.08	< 0.005	< 0.005	—	1.08
Total	0.29	0.28	< 0.005	0.29	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.08	1.08	< 0.005	< 0.005	—	1.08

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
General Office Building	—	—	—	—	—	—	—	—	—	—	—	6.23	10.8	17.0	0.64	0.02	—	37.6
Total	—	—	—	—	—	—	—	—	—	—	—	6.23	10.8	17.0	0.64	0.02	—	37.6
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

General Office Building	—	—	—	—	—	—	—	—	—	—	—	6.23	10.8	17.0	0.64	0.02	—	37.6
Total	—	—	—	—	—	—	—	—	—	—	—	6.23	10.8	17.0	0.64	0.02	—	37.6
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
General Office Building	—	—	—	—	—	—	—	—	—	—	—	1.03	1.79	2.82	0.11	< 0.005	—	6.23
Total	—	—	—	—	—	—	—	—	—	—	—	1.03	1.79	2.82	0.11	< 0.005	—	6.23

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
General Office Building	—	—	—	—	—	—	—	—	—	—	—	24.6	0.00	24.6	2.46	0.00	—	86.2
Total	—	—	—	—	—	—	—	—	—	—	—	24.6	0.00	24.6	2.46	0.00	—	86.2
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

General Office Building	—	—	—	—	—	—	—	—	—	—	—	24.6	0.00	24.6	2.46	0.00	—	86.2
Total	—	—	—	—	—	—	—	—	—	—	—	24.6	0.00	24.6	2.46	0.00	—	86.2
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
General Office Building	—	—	—	—	—	—	—	—	—	—	—	4.08	0.00	4.08	0.41	0.00	—	14.3
Total	—	—	—	—	—	—	—	—	—	—	—	4.08	0.00	4.08	0.41	0.00	—	14.3

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.12	0.12
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.12	0.12
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.12	0.12
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.12	0.12
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.02	0.02
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.02	0.02

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
General Office Building	1,229	1,229	1,229	448,585	25,033	25,033	25,033	9,137,115

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	73,743	24,581	14,741

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	270

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Parking Lot	215,214	247	0.0330	0.0040	0.00
General Office Building	1,869,757	247	0.0330	0.0040	526,842

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Parking Lot	0.00	0.00
General Office Building	3,249,471	187,132

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Parking Lot	0.00	—
General Office Building	45.7	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
General Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
General Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	32.8	annual days of extreme heat
Extreme Precipitation	0.00	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.19	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	4	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A

Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	4	1	1	4
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	11.6
AQ-PM	19.1
AQ-DPM	9.09
Drinking Water	30.6
Lead Risk Housing	50.8
Pesticides	90.5
Toxic Releases	7.58
Traffic	3.06
Effect Indicators	—
CleanUp Sites	74.2
Groundwater	77.9
Haz Waste Facilities/Generators	93.2
Impaired Water Bodies	100.0
Solid Waste	86.5
Sensitive Population	—
Asthma	87.6
Cardio-vascular	83.2
Low Birth Weights	26.9
Socioeconomic Factor Indicators	—
Education	82.7
Housing	51.4
Linguistic	88.8
Poverty	94.9
Unemployment	99.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	16.66880534
Employed	7.173104068
Median HI	5.299627871
Education	—
Bachelor's or higher	5.017323239
High school enrollment	16.8741178
Preschool enrollment	68.89516233
Transportation	—
Auto Access	18.40112922
Active commuting	51.10997049
Social	—
2-parent households	13.28114975
Voting	16.79712563
Neighborhood	—
Alcohol availability	70.25535737
Park access	33.85089183
Retail density	4.311561658
Supermarket access	49.58295907
Tree canopy	0.782753753
Housing	—
Homeownership	38.3036058
Housing habitability	30.96368536
Low-inc homeowner severe housing cost burden	26.76761196
Low-inc renter severe housing cost burden	52.89362248

Uncrowded housing	38.58591043
Health Outcomes	—
Insured adults	21.00603105
Arthritis	0.0
Asthma ER Admissions	30.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	41.7
Cognitively Disabled	50.3
Physically Disabled	19.5
Heart Attack ER Admissions	46.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	54.3
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0

Children	14.1
Elderly	42.0
English Speaking	18.7
Foreign-born	65.3
Outdoor Workers	5.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	85.8
Traffic Density	4.9
Traffic Access	23.0
Other Indices	—
Hardship	92.9
Other Decision Support	—
2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	82.0
Healthy Places Index Score for Project Location (b)	11.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Land use data are based on applicant-provided buildout assumptions.
Operations: Landscape Equipment	Assumed 270 summer days for desert region.
Operations: Water and Waste Water	water consumption calculated based on applicant-provided figures
Operations: Road Dust	85% of roads assumed to be paved based on ICAPCD guidance and project narrative.
Operations: Vehicle Data	Trip rate of 25 trips/tsf is based on SANDAG trip rate for a transit center (Bus Depot).

Lithium Valley Operation - Phase 1 - Research and Development Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Lithium Valley Operation - Phase 1 - Research and Development
Operational Year	2035
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	4.80
Location	33.18829759139308, -115.6026869228474
County	Imperial
City	Unincorporated
Air District	Imperial County APCD
Air Basin	Salton Sea
TAZ	5600
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Research & Development	875	1000sqft	494	875,388	175,078	—	—	—
Parking Lot	1,751	1000sqft	40.2	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	69.3	65.1	46.0	558	1.48	1.18	22,177	22,178	1.12	2,227	2,228	903	161,529	162,432	97.0	7.61	207	167,332
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	57.0	53.4	51.0	335	1.30	1.11	22,177	22,178	1.06	2,227	2,228	903	143,364	144,267	97.0	7.86	27.2	149,062
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	54.2	51.0	36.6	327	1.04	0.86	16,468	16,469	0.81	1,654	1,655	903	116,286	117,189	96.2	6.40	82.4	121,585
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	9.88	9.31	6.69	59.7	0.19	0.16	3,005	3,006	0.15	302	302	150	19,252	19,402	15.9	1.06	13.6	20,130

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	39.0	35.4	40.8	516	1.46	0.80	22,177	22,178	0.75	2,227	2,228	—	148,873	148,873	2.94	5.34	185	150,722

Area	29.2	28.7	0.32	38.1	< 0.005	0.07	—	0.07	0.05	—	0.05	—	157	157	0.01	< 0.005	—	157
Energy	0.28	0.14	2.52	2.12	0.02	0.19	—	0.19	0.19	—	0.19	—	11,551	11,551	1.41	0.14	—	11,629
Water	—	—	—	—	—	—	—	—	—	—	—	867	529	1,397	89.0	2.12	—	4,255
Waste	—	—	—	—	—	—	—	—	—	—	—	35.9	0.00	35.9	3.58	0.00	—	125
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	22.4	22.4
Stationary	0.90	0.82	2.29	2.09	< 0.005	0.12	0.00	0.12	0.12	0.00	0.12	0.00	420	420	0.02	< 0.005	0.00	421
Total	69.3	65.1	46.0	558	1.48	1.18	22,177	22,178	1.12	2,227	2,228	903	161,529	162,432	97.0	7.61	207	167,332
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	33.4	30.0	46.2	331	1.28	0.80	22,177	22,178	0.75	2,227	2,228	—	130,864	130,864	2.99	5.59	4.79	132,609
Area	22.4	22.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.28	0.14	2.52	2.12	0.02	0.19	—	0.19	0.19	—	0.19	—	11,551	11,551	1.41	0.14	—	11,629
Water	—	—	—	—	—	—	—	—	—	—	—	867	529	1,397	89.0	2.12	—	4,255
Waste	—	—	—	—	—	—	—	—	—	—	—	35.9	0.00	35.9	3.58	0.00	—	125
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	22.4	22.4
Stationary	0.90	0.82	2.29	2.09	< 0.005	0.12	0.00	0.12	0.12	0.00	0.12	0.00	420	420	0.02	< 0.005	0.00	421
Total	57.0	53.4	51.0	335	1.30	1.11	22,177	22,178	1.06	2,227	2,228	903	143,364	144,267	97.0	7.86	27.2	149,062
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	26.3	23.8	33.6	297	1.02	0.60	16,468	16,469	0.57	1,654	1,654	—	104,033	104,033	2.20	4.13	60.0	105,379
Area	27.4	27.0	0.24	28.2	< 0.005	0.05	—	0.05	0.04	—	0.04	—	116	116	< 0.005	< 0.005	—	116
Energy	0.28	0.14	2.52	2.12	0.02	0.19	—	0.19	0.19	—	0.19	—	11,551	11,551	1.41	0.14	—	11,629
Water	—	—	—	—	—	—	—	—	—	—	—	867	529	1,397	89.0	2.12	—	4,255
Waste	—	—	—	—	—	—	—	—	—	—	—	35.9	0.00	35.9	3.58	0.00	—	125
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	22.4	22.4
Stationary	0.12	0.11	0.31	0.29	< 0.005	0.02	0.00	0.02	0.02	0.00	0.02	0.00	57.5	57.5	< 0.005	< 0.005	0.00	57.7
Total	54.2	51.0	36.6	327	1.04	0.86	16,468	16,469	0.81	1,654	1,655	903	116,286	117,189	96.2	6.40	82.4	121,585

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	4.81	4.33	6.13	54.1	0.19	0.11	3,005	3,006	0.10	302	302	—	17,224	17,224	0.37	0.68	9.94	17,447
Area	5.00	4.93	0.04	5.14	< 0.005	0.01	—	0.01	0.01	—	0.01	—	19.2	19.2	< 0.005	< 0.005	—	19.2
Energy	0.05	0.03	0.46	0.39	< 0.005	0.03	—	0.03	0.03	—	0.03	—	1,912	1,912	0.23	0.02	—	1,925
Water	—	—	—	—	—	—	—	—	—	—	—	144	87.6	231	14.7	0.35	—	704
Waste	—	—	—	—	—	—	—	—	—	—	—	5.94	0.00	5.94	0.59	0.00	—	20.8
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.70	3.70
Stationary	0.02	0.02	0.06	0.05	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	9.52	9.52	< 0.005	< 0.005	0.00	9.55
Total	9.88	9.31	6.69	59.7	0.19	0.16	3,005	3,006	0.15	302	302	150	19,252	19,402	15.9	1.06	13.6	20,130

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Research & Development	39.0	35.4	40.8	516	1.46	0.80	22,177	22,178	0.75	2,227	2,228	—	148,873	148,873	2.94	5.34	185	150,722
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	39.0	35.4	40.8	516	1.46	0.80	22,177	22,178	0.75	2,227	2,228	—	148,873	148,873	2.94	5.34	185	150,722
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Research & Development	33.4	30.0	46.2	331	1.28	0.80	22,177	22,178	0.75	2,227	2,228	—	130,864	130,864	2.99	5.59	4.79	132,609
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	33.4	30.0	46.2	331	1.28	0.80	22,177	22,178	0.75	2,227	2,228	—	130,864	130,864	2.99	5.59	4.79	132,609
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Research & Development	4.81	4.33	6.13	54.1	0.19	0.11	3,005	3,006	0.10	302	302	—	17,224	17,224	0.37	0.68	9.94	17,447
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	4.81	4.33	6.13	54.1	0.19	0.11	3,005	3,006	0.10	302	302	—	17,224	17,224	0.37	0.68	9.94	17,447

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Research & Development	—	—	—	—	—	—	—	—	—	—	—	—	8,168	8,168	1.09	0.13	—	8,235
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	376	376	0.05	0.01	—	379
Total	—	—	—	—	—	—	—	—	—	—	—	—	8,545	8,545	1.14	0.14	—	8,614
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Research & Development	—	—	—	—	—	—	—	—	—	—	—	—	8,168	8,168	1.09	0.13	—	8,235
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	376	376	0.05	0.01	—	379
Total	—	—	—	—	—	—	—	—	—	—	—	—	8,545	8,545	1.14	0.14	—	8,614
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Research & Development	—	—	—	—	—	—	—	—	—	—	—	—	1,352	1,352	0.18	0.02	—	1,363
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	62.3	62.3	0.01	< 0.005	—	62.8
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,415	1,415	0.19	0.02	—	1,426

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Research & Development	0.28	0.14	2.52	2.12	0.02	0.19	—	0.19	0.19	—	0.19	—	3,006	3,006	0.27	0.01	—	3,015
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.28	0.14	2.52	2.12	0.02	0.19	—	0.19	0.19	—	0.19	—	3,006	3,006	0.27	0.01	—	3,015
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Research & Development	0.28	0.14	2.52	2.12	0.02	0.19	—	0.19	0.19	—	0.19	—	3,006	3,006	0.27	0.01	—	3,015
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.28	0.14	2.52	2.12	0.02	0.19	—	0.19	0.19	—	0.19	—	3,006	3,006	0.27	0.01	—	3,015
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Research & Development	0.05	0.03	0.46	0.39	< 0.005	0.03	—	0.03	0.03	—	0.03	—	498	498	0.04	< 0.005	—	499
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.05	0.03	0.46	0.39	< 0.005	0.03	—	0.03	0.03	—	0.03	—	498	498	0.04	< 0.005	—	499

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	18.9	18.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	3.54	3.54	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Landscape Equipment	6.78	6.26	0.32	38.1	< 0.005	0.07	—	0.07	0.05	—	0.05	—	157	157	0.01	< 0.005	—	157
Total	29.2	28.7	0.32	38.1	< 0.005	0.07	—	0.07	0.05	—	0.05	—	157	157	0.01	< 0.005	—	157
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	18.9	18.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	3.54	3.54	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	22.4	22.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	3.44	3.44	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.65	0.65	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.92	0.84	0.04	5.14	< 0.005	0.01	—	0.01	0.01	—	0.01	—	19.2	19.2	< 0.005	< 0.005	—	19.2
Total	5.00	4.93	0.04	5.14	< 0.005	0.01	—	0.01	0.01	—	0.01	—	19.2	19.2	< 0.005	< 0.005	—	19.2

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Research & Development	—	—	—	—	—	—	—	—	—	—	—	867	529	1,397	89.0	2.12	—	4,255
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	867	529	1,397	89.0	2.12	—	4,255
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Research & Development	—	—	—	—	—	—	—	—	—	—	—	867	529	1,397	89.0	2.12	—	4,255
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	867	529	1,397	89.0	2.12	—	4,255
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Research & Development	—	—	—	—	—	—	—	—	—	—	—	144	87.6	231	14.7	0.35	—	704
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	144	87.6	231	14.7	0.35	—	704

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Research & Development	—	—	—	—	—	—	—	—	—	—	—	35.9	0.00	35.9	3.58	0.00	—	125
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	35.9	0.00	35.9	3.58	0.00	—	125
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Research & Development	—	—	—	—	—	—	—	—	—	—	—	35.9	0.00	35.9	3.58	0.00	—	125
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	35.9	0.00	35.9	3.58	0.00	—	125
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Research & Development	—	—	—	—	—	—	—	—	—	—	—	5.94	0.00	5.94	0.59	0.00	—	20.8
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	5.94	0.00	5.94	0.59	0.00	—	20.8

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Research & Development	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	22.4	22.4
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	22.4	22.4
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Research & Development	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	22.4	22.4
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	22.4	22.4
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Research & Development	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.70	3.70
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.70	3.70

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.90	0.82	2.29	2.09	< 0.005	0.12	0.00	0.12	0.12	0.00	0.12	0.00	420	420	0.02	< 0.005	0.00	421
Total	0.90	0.82	2.29	2.09	< 0.005	0.12	0.00	0.12	0.12	0.00	0.12	0.00	420	420	0.02	< 0.005	0.00	421
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.90	0.82	2.29	2.09	< 0.005	0.12	0.00	0.12	0.12	0.00	0.12	0.00	420	420	0.02	< 0.005	0.00	421
Total	0.90	0.82	2.29	2.09	< 0.005	0.12	0.00	0.12	0.12	0.00	0.12	0.00	420	420	0.02	< 0.005	0.00	421
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Emergency Generat	0.02	0.02	0.06	0.05	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	9.52	9.52	< 0.005	< 0.005	0.00	9.55
Total	0.02	0.02	0.06	0.05	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	9.52	9.52	< 0.005	< 0.005	0.00	9.55

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Research & Development	9,699	1,637	954	2,663,857	197,563	33,343	19,435	54,259,433
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	1,313,082	437,694	105,047

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	270

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)

Research & Development	33,293,161	89.5	0.0120	0.0014	9,381,023
Parking Lot	1,533,680	89.5	0.0120	0.0014	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Research & Development	452,706,855	3,769,361
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Research & Development	66.5	—
Parking Lot	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Research & Development	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Research & Development	Household refrigerators and/or freezers	R-134a	1,430	0.45	0.60	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
Emergency Generator	Diesel	1.00	1.00	50.0	500	0.73

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	32.8	annual days of extreme heat
Extreme Precipitation	0.00	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.19	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A

Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	11.6
AQ-PM	19.1
AQ-DPM	9.09
Drinking Water	30.6
Lead Risk Housing	50.8
Pesticides	90.5
Toxic Releases	7.58
Traffic	3.06
Effect Indicators	—
CleanUp Sites	74.2
Groundwater	77.9
Haz Waste Facilities/Generators	93.2
Impaired Water Bodies	100.0
Solid Waste	86.5
Sensitive Population	—
Asthma	87.6
Cardio-vascular	83.2
Low Birth Weights	26.9
Socioeconomic Factor Indicators	—
Education	82.7
Housing	51.4
Linguistic	88.8
Poverty	94.9
Unemployment	99.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	16.66880534
Employed	7.173104068
Median HI	5.299627871
Education	—
Bachelor's or higher	5.017323239
High school enrollment	16.8741178
Preschool enrollment	68.89516233
Transportation	—
Auto Access	18.40112922
Active commuting	51.10997049
Social	—
2-parent households	13.28114975
Voting	16.79712563
Neighborhood	—
Alcohol availability	70.25535737
Park access	33.85089183
Retail density	4.311561658
Supermarket access	49.58295907
Tree canopy	0.782753753
Housing	—
Homeownership	38.3036058
Housing habitability	30.96368536
Low-inc homeowner severe housing cost burden	26.76761196
Low-inc renter severe housing cost burden	52.89362248

Uncrowded housing	38.58591043
Health Outcomes	—
Insured adults	21.00603105
Arthritis	0.0
Asthma ER Admissions	30.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	41.7
Cognitively Disabled	50.3
Physically Disabled	19.5
Heart Attack ER Admissions	46.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	54.3
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0

Children	14.1
Elderly	42.0
English Speaking	18.7
Foreign-born	65.3
Outdoor Workers	5.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	85.8
Traffic Density	4.9
Traffic Access	23.0
Other Indices	—
Hardship	92.9
Other Decision Support	—
2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	82.0
Healthy Places Index Score for Project Location (b)	11.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Land use data are based on applicant-provided buildout assumptions.
Operations: Vehicle Data	Trip rates are based on ITE Land Use Code 760.
Operations: Landscape Equipment	Assumed 270 summer days for desert region.
Operations: Road Dust	85% of roads assumed to be paved based on ICAPCD guidance.
Operations: Water and Waste Water	Water data are based on applicant-provided calculations for the land use.
Operations: Emergency Generators and Fire Pumps	Assumed 1 back-up generator operating 1 hour/day and 50 hours/year for maintenance and testing.
Characteristics: Utility Information	IID intensity factors adjusted per RPS assuming 90% renewables by 2035 as required by SB 1020.

Lithium Valley Operation - Phase 1 - Solar Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Lithium Valley Operation - Phase 1 - Solar
Operational Year	2035
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	4.80
Location	33.18829759139308, -115.6026869228474
County	Imperial
City	Unincorporated
Air District	Imperial County APCD
Air Basin	Salton Sea
TAZ	5600
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
General Heavy Industry	277	1000sqft	941	276,503	55,301	—	—	—
Parking Lot	553	1000sqft	12.7	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	11.0	10.7	4.70	16.3	0.01	0.26	5.39	5.65	0.26	0.54	0.80	185	2,847	3,032	18.8	0.04	720	4,233
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	8.89	8.72	4.60	4.26	0.01	0.24	5.39	5.63	0.24	0.54	0.78	185	2,794	2,978	18.8	0.04	720	4,179
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	9.16	8.99	1.34	10.1	< 0.005	0.08	3.80	3.88	0.08	0.38	0.46	185	2,213	2,398	18.7	0.03	720	3,596
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.67	1.64	0.24	1.84	< 0.005	0.01	0.69	0.71	0.01	0.07	0.08	30.6	366	397	3.10	0.01	119	595

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.01	0.01	0.01	0.12	< 0.005	< 0.005	5.39	5.39	< 0.005	0.54	0.54	—	36.1	36.1	< 0.005	< 0.005	0.04	36.5

Area	9.22	9.05	0.10	12.0	< 0.005	0.02	—	0.02	0.02	—	0.02	—	49.5	49.5	< 0.005	< 0.005	—	49.6
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	1,910	1,910	0.26	0.03	—	1,925
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	12.6	12.6	< 0.005	< 0.005	—	12.7
Waste	—	—	—	—	—	—	—	—	—	—	—	185	0.00	185	18.5	0.00	—	646
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	720	720
Stationary	1.80	1.64	4.59	4.18	0.01	0.24	0.00	0.24	0.24	0.00	0.24	0.00	840	840	0.03	0.01	0.00	842
Total	11.0	10.7	4.70	16.3	0.01	0.26	5.39	5.65	0.26	0.54	0.80	185	2,847	3,032	18.8	0.04	720	4,233
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.01	0.01	0.01	0.08	< 0.005	< 0.005	5.39	5.39	< 0.005	0.54	0.54	—	31.7	31.7	< 0.005	< 0.005	< 0.005	32.1
Area	7.08	7.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	1,910	1,910	0.26	0.03	—	1,925
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	12.6	12.6	< 0.005	< 0.005	—	12.7
Waste	—	—	—	—	—	—	—	—	—	—	—	185	0.00	185	18.5	0.00	—	646
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	720	720
Stationary	1.80	1.64	4.59	4.18	0.01	0.24	0.00	0.24	0.24	0.00	0.24	0.00	840	840	0.03	0.01	0.00	842
Total	8.89	8.72	4.60	4.26	0.01	0.24	5.39	5.63	0.24	0.54	0.78	185	2,794	2,978	18.8	0.04	720	4,179
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.01	< 0.005	0.01	0.07	< 0.005	< 0.005	3.80	3.80	< 0.005	0.38	0.38	—	23.9	23.9	< 0.005	< 0.005	0.01	24.3
Area	8.66	8.54	0.07	8.90	< 0.005	0.02	—	0.02	0.01	—	0.01	—	36.6	36.6	< 0.005	< 0.005	—	36.7
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	1,910	1,910	0.26	0.03	—	1,925
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	12.6	12.6	< 0.005	< 0.005	—	12.7
Waste	—	—	—	—	—	—	—	—	—	—	—	185	0.00	185	18.5	0.00	—	646
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	720	720
Stationary	0.49	0.45	1.26	1.15	< 0.005	0.07	0.00	0.07	0.07	0.00	0.07	0.00	230	230	0.01	< 0.005	0.00	231
Total	9.16	8.99	1.34	10.1	< 0.005	0.08	3.80	3.88	0.08	0.38	0.46	185	2,213	2,398	18.7	0.03	720	3,596

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	0.69	0.69	< 0.005	0.07	0.07	—	3.96	3.96	< 0.005	< 0.005	< 0.005	4.02
Area	1.58	1.56	0.01	1.62	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.06	6.06	< 0.005	< 0.005	—	6.08
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	316	316	0.04	0.01	—	319
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	2.08	2.08	< 0.005	< 0.005	—	2.10
Waste	—	—	—	—	—	—	—	—	—	—	—	30.6	0.00	30.6	3.06	0.00	—	107
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	119	119
Stationary	0.09	0.08	0.23	0.21	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	38.1	38.1	< 0.005	< 0.005	0.00	38.2
Total	1.67	1.64	0.24	1.84	< 0.005	0.01	0.69	0.71	0.01	0.07	0.08	30.6	366	397	3.10	0.01	119	595

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Mobile source emissions results are presented in Sections 2.6. No further detailed breakdown of emissions is available.

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	1,791	1,791	0.24	0.03	—	1,806
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	119	119	0.02	< 0.005	—	120

Total	—	—	—	—	—	—	—	—	—	—	—	—	1,910	1,910	0.26	0.03	—	1,925
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	1,791	1,791	0.24	0.03	—	1,806
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	119	119	0.02	< 0.005	—	120
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,910	1,910	0.26	0.03	—	1,925
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	297	297	0.04	< 0.005	—	299
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	19.7	19.7	< 0.005	< 0.005	—	19.8
Total	—	—	—	—	—	—	—	—	—	—	—	—	316	316	0.04	0.01	—	319

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	5.96	5.96	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	1.12	1.12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	2.14	1.98	0.10	12.0	< 0.005	0.02	—	0.02	0.02	—	0.02	—	49.5	49.5	< 0.005	< 0.005	—	49.6
Total	9.22	9.05	0.10	12.0	< 0.005	0.02	—	0.02	0.02	—	0.02	—	49.5	49.5	< 0.005	< 0.005	—	49.6

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	5.96	5.96	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	1.12	1.12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	7.08	7.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	1.09	1.09	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.20	0.20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.29	0.27	0.01	1.62	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.06	6.06	< 0.005	< 0.005	—	6.08
Total	1.58	1.56	0.01	1.62	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.06	6.06	< 0.005	< 0.005	—	6.08

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	0.00	12.6	12.6	< 0.005	< 0.005	—	12.7
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	12.6	12.6	< 0.005	< 0.005	—	12.7
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	0.00	12.6	12.6	< 0.005	< 0.005	—	12.7
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	12.6	12.6	< 0.005	< 0.005	—	12.7
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	0.00	2.08	2.08	< 0.005	< 0.005	—	2.10
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	2.08	2.08	< 0.005	< 0.005	—	2.10

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	185	0.00	185	18.5	0.00	—	646
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	185	0.00	185	18.5	0.00	—	646
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	185	0.00	185	18.5	0.00	—	646
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	185	0.00	185	18.5	0.00	—	646
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	30.6	0.00	30.6	3.06	0.00	—	107
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	30.6	0.00	30.6	3.06	0.00	—	107

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	720	720
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	720	720
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	720	720
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	720	720
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	119	119
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	119	119

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	1.80	1.64	4.59	4.18	0.01	0.24	0.00	0.24	0.24	0.00	0.24	0.00	840	840	0.03	0.01	0.00	842
Total	1.80	1.64	4.59	4.18	0.01	0.24	0.00	0.24	0.24	0.00	0.24	0.00	840	840	0.03	0.01	0.00	842
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	1.80	1.64	4.59	4.18	0.01	0.24	0.00	0.24	0.24	0.00	0.24	0.00	840	840	0.03	0.01	0.00	842
Total	1.80	1.64	4.59	4.18	0.01	0.24	0.00	0.24	0.24	0.00	0.24	0.00	840	840	0.03	0.01	0.00	842
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.09	0.08	0.23	0.21	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	38.1	38.1	< 0.005	< 0.005	0.00	38.2
Total	0.09	0.08	0.23	0.21	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	38.1	38.1	< 0.005	< 0.005	0.00	38.2

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipm Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Total all Land Uses	2.00	0.00	0.00	521	48.0	0.00	0.00	12,514

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	414,755	138,252	33,181

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	270

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
General Heavy Industry	7,300,000	89.5	0.0120	0.0014	0.00
Parking Lot	484,437	89.5	0.0120	0.0014	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
General Heavy Industry	0.00	15,901,078
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
General Heavy Industry	343	—
Parking Lot	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
General Heavy Industry	User Defined	User Defined	23,900	1.64	0.50	0.50	30.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
Emergency Generator	Diesel	2.00	1.00	100	500	0.73

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	32.8	annual days of extreme heat
Extreme Precipitation	0.00	annual days with precipitation above 20 mm

Sea Level Rise	—	meters of inundation depth
Wildfire	0.19	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A

Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	11.6
AQ-PM	19.1
AQ-DPM	9.09
Drinking Water	30.6
Lead Risk Housing	50.8
Pesticides	90.5
Toxic Releases	7.58
Traffic	3.06
Effect Indicators	—

CleanUp Sites	74.2
Groundwater	77.9
Haz Waste Facilities/Generators	93.2
Impaired Water Bodies	100.0
Solid Waste	86.5
Sensitive Population	—
Asthma	87.6
Cardio-vascular	83.2
Low Birth Weights	26.9
Socioeconomic Factor Indicators	—
Education	82.7
Housing	51.4
Linguistic	88.8
Poverty	94.9
Unemployment	99.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	16.66880534
Employed	7.173104068
Median HI	5.299627871
Education	—
Bachelor's or higher	5.017323239
High school enrollment	16.8741178
Preschool enrollment	68.89516233
Transportation	—

Auto Access	18.40112922
Active commuting	51.10997049
Social	—
2-parent households	13.28114975
Voting	16.79712563
Neighborhood	—
Alcohol availability	70.25535737
Park access	33.85089183
Retail density	4.311561658
Supermarket access	49.58295907
Tree canopy	0.782753753
Housing	—
Homeownership	38.3036058
Housing habitability	30.96368536
Low-inc homeowner severe housing cost burden	26.76761196
Low-inc renter severe housing cost burden	52.89362248
Uncrowded housing	38.58591043
Health Outcomes	—
Insured adults	21.00603105
Arthritis	0.0
Asthma ER Admissions	30.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	41.7

Cognitively Disabled	50.3
Physically Disabled	19.5
Heart Attack ER Admissions	46.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	54.3
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	14.1
Elderly	42.0
English Speaking	18.7
Foreign-born	65.3
Outdoor Workers	5.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	85.8
Traffic Density	4.9
Traffic Access	23.0
Other Indices	—
Hardship	92.9
Other Decision Support	—

2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	82.0
Healthy Places Index Score for Project Location (b)	11.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Land use data are based on applicant-provided buildout assumptions.76,503 square feet of building square feet is anticipated for O&M building based on land use buildout.
Operations: Road Dust	85% of roads assumed to be paved based on ICAPCD guidance and project narrative.
Operations: Energy Use	Electricity consumption assumed to include system auxiliary energy consumption (2%), based on an assumed capacity of 250 MW system, operating 4 hours/day and 365 days/year.
Operations: Water and Waste Water	Water data are based on applicant-provided calculations for the land use. Outdoor water use would include annual panel washing and other infrequent activities. No indoor water use anticipated.

Operations: Refrigerants	SF6 usage anticipated for breakers/inverters. Assumed 1000 pounds of SF6 across the site.
Operations: Landscape Equipment	Assumed 270 summer days for desert region.
Operations: Emergency Generators and Fire Pumps	Assumed 2 back-up generators operating 1 hour/day and 100 hours/year for maintenance and testing.
Characteristics: Utility Information	IID intensity factors adjusted per RPS assuming 90% renewables by 2035 as required by SB 1020.

Lithium Valley Operation - Phase 1 - Substation Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Lithium Valley Operation - Phase 1 - Substation
Operational Year	2035
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	4.80
Location	33.18829759139308, -115.6026869228474
County	Imperial
City	Unincorporated
Air District	Imperial County APCD
Air Basin	Salton Sea
TAZ	5600
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
General Heavy Industry	511	1000sqft	477	510,922	102,184	—	—	—
Parking Lot	6,284	1000sqft	144	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	18.1	17.8	0.20	22.3	< 0.005	0.04	5.39	5.43	0.03	0.54	0.57	341	4,518	4,859	34.7	0.07	72.2	5,821
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	14.1	14.1	0.01	0.08	< 0.005	< 0.005	5.39	5.39	< 0.005	0.54	0.54	341	4,422	4,763	34.7	0.07	72.2	5,725
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	17.0	16.8	0.15	16.5	< 0.005	0.03	3.80	3.83	0.02	0.38	0.40	341	4,482	4,823	34.7	0.07	72.2	5,785
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.11	3.07	0.03	3.01	< 0.005	0.01	0.69	0.70	< 0.005	0.07	0.07	56.5	742	799	5.75	0.01	12.0	958

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.01	0.01	0.01	0.12	< 0.005	< 0.005	5.39	5.39	< 0.005	0.54	0.54	—	36.1	36.1	< 0.005	< 0.005	0.04	36.5

Area	18.1	17.7	0.19	22.2	< 0.005	0.04	—	0.04	0.03	—	0.03	—	91.4	91.4	< 0.005	< 0.005	—	91.7
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	3,718	3,718	0.50	0.06	—	3,748
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	672	672	0.09	0.01	—	677
Waste	—	—	—	—	—	—	—	—	—	—	—	341	0.00	341	34.1	0.00	—	1,195
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	72.2	72.2
Total	18.1	17.8	0.20	22.3	< 0.005	0.04	5.39	5.43	0.03	0.54	0.57	341	4,518	4,859	34.7	0.07	72.2	5,821
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.01	0.01	0.01	0.08	< 0.005	< 0.005	5.39	5.39	< 0.005	0.54	0.54	—	31.7	31.7	< 0.005	< 0.005	< 0.005	32.1
Area	14.1	14.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	3,718	3,718	0.50	0.06	—	3,748
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	672	672	0.09	0.01	—	677
Waste	—	—	—	—	—	—	—	—	—	—	—	341	0.00	341	34.1	0.00	—	1,195
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	72.2	72.2
Total	14.1	14.1	0.01	0.08	< 0.005	< 0.005	5.39	5.39	< 0.005	0.54	0.54	341	4,422	4,763	34.7	0.07	72.2	5,725
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.01	< 0.005	0.01	0.07	< 0.005	< 0.005	3.80	3.80	< 0.005	0.38	0.38	—	23.9	23.9	< 0.005	< 0.005	0.01	24.3
Area	17.0	16.8	0.14	16.4	< 0.005	0.03	—	0.03	0.02	—	0.02	—	67.6	67.6	< 0.005	< 0.005	—	67.8
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	3,718	3,718	0.50	0.06	—	3,748
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	672	672	0.09	0.01	—	677
Waste	—	—	—	—	—	—	—	—	—	—	—	341	0.00	341	34.1	0.00	—	1,195
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	72.2	72.2
Total	17.0	16.8	0.15	16.5	< 0.005	0.03	3.80	3.83	0.02	0.38	0.40	341	4,482	4,823	34.7	0.07	72.2	5,785
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	0.69	0.69	< 0.005	0.07	0.07	—	3.96	3.96	< 0.005	< 0.005	< 0.005	4.02
Area	3.11	3.07	0.03	3.00	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	11.2	11.2	< 0.005	< 0.005	—	11.2
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	616	616	0.08	0.01	—	621

Water	—	—	—	—	—	—	—	—	—	—	—	0.00	111	111	0.01	< 0.005	—	112
Waste	—	—	—	—	—	—	—	—	—	—	—	56.5	0.00	56.5	5.65	0.00	—	198
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	12.0	12.0
Total	3.11	3.07	0.03	3.01	< 0.005	0.01	0.69	0.70	< 0.005	0.07	0.07	56.5	742	799	5.75	0.01	12.0	958

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Mobile source emissions results are presented in Sections 2.6. No further detailed breakdown of emissions is available.

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	3,718	3,718	0.50	0.06	—	3,748
Total	—	—	—	—	—	—	—	—	—	—	—	—	3,718	3,718	0.50	0.06	—	3,748
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	3,718	3,718	0.50	0.06	—	3,748
Total	—	—	—	—	—	—	—	—	—	—	—	—	3,718	3,718	0.50	0.06	—	3,748
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	616	616	0.08	0.01	—	621
Total	—	—	—	—	—	—	—	—	—	—	—	—	616	616	0.08	0.01	—	621

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	11.4	11.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	2.67	2.67	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	3.96	3.65	0.19	22.2	< 0.005	0.04	—	0.04	0.03	—	0.03	—	91.4	91.4	< 0.005	< 0.005	—	91.7
Total	18.1	17.7	0.19	22.2	< 0.005	0.04	—	0.04	0.03	—	0.03	—	91.4	91.4	< 0.005	< 0.005	—	91.7
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	11.4	11.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architect Coatings	2.67	2.67	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	14.1	14.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	2.09	2.09	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.49	0.49	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.53	0.49	0.03	3.00	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	11.2	11.2	< 0.005	< 0.005	—	11.2
Total	3.11	3.07	0.03	3.00	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	11.2	11.2	< 0.005	< 0.005	—	11.2

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	0.00	672	672	0.09	0.01	—	677
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	672	672	0.09	0.01	—	677

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	0.00	672	672	0.09	0.01	—	677
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	672	672	0.09	0.01	—	677
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	0.00	111	111	0.01	< 0.005	—	112
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	111	111	0.01	< 0.005	—	112

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	341	0.00	341	34.1	0.00	—	1,195
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	341	0.00	341	34.1	0.00	—	1,195

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	341	0.00	341	34.1	0.00	—	1,195
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	341	0.00	341	34.1	0.00	—	1,195
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	56.5	0.00	56.5	5.65	0.00	—	198
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	56.5	0.00	56.5	5.65	0.00	—	198

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	72.2	72.2
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	72.2	72.2
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	72.2	72.2
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	72.2	72.2
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	12.0	12.0
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	12.0	12.0

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Remove	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Total all Land Uses	2.00	0.00	0.00	521	48.0	0.00	0.00	12,514

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	766,383	255,461	377,069

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	270

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
General Heavy Industry	0.00	247	0.0330	0.0040	0.00
Parking Lot	5,505,204	247	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
General Heavy Industry	0.00	309,168,340
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
General Heavy Industry	634	—
Parking Lot	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
General Heavy Industry	User Defined	User Defined	23,900	0.89	0.05	0.05	30.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
Emergency Generator	Diesel	1.00	1.00	50.0	500	0.73

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	32.8	annual days of extreme heat
Extreme Precipitation	0.00	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.19	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A

Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	11.6
AQ-PM	19.1
AQ-DPM	9.09
Drinking Water	30.6
Lead Risk Housing	50.8
Pesticides	90.5
Toxic Releases	7.58
Traffic	3.06
Effect Indicators	—
CleanUp Sites	74.2
Groundwater	77.9
Haz Waste Facilities/Generators	93.2
Impaired Water Bodies	100.0
Solid Waste	86.5
Sensitive Population	—
Asthma	87.6
Cardio-vascular	83.2
Low Birth Weights	26.9
Socioeconomic Factor Indicators	—
Education	82.7
Housing	51.4
Linguistic	88.8

Poverty	94.9
Unemployment	99.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	16.66880534
Employed	7.173104068
Median HI	5.299627871
Education	—
Bachelor's or higher	5.017323239
High school enrollment	16.8741178
Preschool enrollment	68.89516233
Transportation	—
Auto Access	18.40112922
Active commuting	51.10997049
Social	—
2-parent households	13.28114975
Voting	16.79712563
Neighborhood	—
Alcohol availability	70.25535737
Park access	33.85089183
Retail density	4.311561658
Supermarket access	49.58295907
Tree canopy	0.782753753
Housing	—
Homeownership	38.3036058

Housing habitability	30.96368536
Low-inc homeowner severe housing cost burden	26.76761196
Low-inc renter severe housing cost burden	52.89362248
Uncrowded housing	38.58591043
Health Outcomes	—
Insured adults	21.00603105
Arthritis	0.0
Asthma ER Admissions	30.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	41.7
Cognitively Disabled	50.3
Physically Disabled	19.5
Heart Attack ER Admissions	46.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	54.3
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0

Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	14.1
Elderly	42.0
English Speaking	18.7
Foreign-born	65.3
Outdoor Workers	5.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	85.8
Traffic Density	4.9
Traffic Access	23.0
Other Indices	—
Hardship	92.9
Other Decision Support	—
2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	82.0
Healthy Places Index Score for Project Location (b)	11.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Operations: Energy Use	Natural gas not anticipated as part of project operations. Substation uses will not themselves generate electricity.
Operations: Water and Waste Water	Water data are based on applicant-provided calculations for the land use. Indoor water not anticipated as part of operations.
Operations: Refrigerants	Assumed 1,000 lbs. of SF6 as part of project operations.
Land Use	Land use data are based on applicant-provided buildout assumptions.
Operations: Landscape Equipment	Assumed 270 summer days for desert region.
Operations: Emergency Generators and Fire Pumps	Assumed 1 back-up generator operating 1 hour/day and 50 hours/year as part of project operations.
Operations: Road Dust	85% of roads assumed to be paved based on ICAPCD guidance and project narrative.

Lithium Valley Operation - Phase 1 - Temporary Workforce Housing Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Lithium Valley Operation - Phase 1 - Temporary Workforce Housing
Operational Year	2035
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	4.80
Location	33.18829759139308, -115.6026869228474
County	Imperial
City	Unincorporated
Air District	Imperial County APCD
Air Basin	Salton Sea
TAZ	5600
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Mobile Home Park	1,079	Dwelling Unit	305	400,789	80,158	—	3,841	—
Parking Lot	802	1000sqft	18.4	17.8	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	29.2	27.9	13.2	215	0.43	0.26	6,446	6,446	0.24	647	647	461	54,601	55,062	48.6	1.87	56.6	56,890
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	21.6	20.6	14.2	101	0.37	0.23	6,446	6,446	0.22	647	647	461	49,205	49,666	48.6	1.94	4.26	51,463
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	25.9	24.7	13.6	160	0.38	0.25	6,150	6,150	0.23	618	618	461	50,134	50,596	48.6	1.85	25.3	52,388
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.73	4.50	2.49	29.2	0.07	0.05	1,122	1,122	0.04	113	113	76.4	8,300	8,377	8.04	0.31	4.19	8,673

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	13.5	12.5	12.6	154	0.43	0.23	6,446	6,446	0.22	647	647	—	43,425	43,425	0.93	1.61	53.7	43,981

Area	15.7	15.4	0.57	61.5	< 0.005	0.03	—	0.03	0.02	—	0.02	0.00	164	164	0.01	< 0.005	—	164
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	10,958	10,958	1.47	0.18	—	11,048
Water	—	—	—	—	—	—	—	—	—	—	—	31.4	54.0	85.4	3.23	0.08	—	189
Waste	—	—	—	—	—	—	—	—	—	—	—	430	0.00	430	43.0	0.00	—	1,504
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.87	2.87
Total	29.2	27.9	13.2	215	0.43	0.26	6,446	6,446	0.24	647	647	461	54,601	55,062	48.6	1.87	56.6	56,890
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	11.5	10.4	14.2	101	0.37	0.23	6,446	6,446	0.22	647	647	—	38,193	38,193	0.96	1.68	1.39	38,719
Area	10.1	10.1	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	10,958	10,958	1.47	0.18	—	11,048
Water	—	—	—	—	—	—	—	—	—	—	—	31.4	54.0	85.4	3.23	0.08	—	189
Waste	—	—	—	—	—	—	—	—	—	—	—	430	0.00	430	43.0	0.00	—	1,504
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.87	2.87
Total	21.6	20.6	14.2	101	0.37	0.23	6,446	6,446	0.22	647	647	461	49,205	49,666	48.6	1.94	4.26	51,463
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	11.7	10.7	13.2	115	0.38	0.23	6,150	6,150	0.21	618	618	—	39,001	39,001	0.90	1.60	22.4	39,522
Area	14.2	14.0	0.42	45.5	< 0.005	0.02	—	0.02	0.02	—	0.02	0.00	121	121	0.01	< 0.005	—	121
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	10,958	10,958	1.47	0.18	—	11,048
Water	—	—	—	—	—	—	—	—	—	—	—	31.4	54.0	85.4	3.23	0.08	—	189
Waste	—	—	—	—	—	—	—	—	—	—	—	430	0.00	430	43.0	0.00	—	1,504
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.87	2.87
Total	25.9	24.7	13.6	160	0.38	0.25	6,150	6,150	0.23	618	618	461	50,134	50,596	48.6	1.85	25.3	52,388
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	2.13	1.95	2.41	20.9	0.07	0.04	1,122	1,122	0.04	113	113	—	6,457	6,457	0.15	0.26	3.71	6,543
Area	2.60	2.56	0.08	8.31	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	20.0	20.0	< 0.005	< 0.005	—	20.1
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	1,814	1,814	0.24	0.03	—	1,829

Water	—	—	—	—	—	—	—	—	—	—	—	5.21	8.94	14.1	0.53	0.01	—	31.3
Waste	—	—	—	—	—	—	—	—	—	—	—	71.2	0.00	71.2	7.12	0.00	—	249
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.48	0.48
Total	4.73	4.50	2.49	29.2	0.07	0.05	1,122	1,122	0.04	113	113	76.4	8,300	8,377	8.04	0.31	4.19	8,673

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile Home Park	13.5	12.5	12.6	154	0.43	0.23	6,446	6,446	0.22	647	647	—	43,425	43,425	0.93	1.61	53.7	43,981
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	13.5	12.5	12.6	154	0.43	0.23	6,446	6,446	0.22	647	647	—	43,425	43,425	0.93	1.61	53.7	43,981
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile Home Park	11.5	10.4	14.2	101	0.37	0.23	6,446	6,446	0.22	647	647	—	38,193	38,193	0.96	1.68	1.39	38,719
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	11.5	10.4	14.2	101	0.37	0.23	6,446	6,446	0.22	647	647	—	38,193	38,193	0.96	1.68	1.39	38,719
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Mobile Home Park	2.13	1.95	2.41	20.9	0.07	0.04	1,122	1,122	0.04	113	113	—	6,457	6,457	0.15	0.26	3.71	6,543
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	2.13	1.95	2.41	20.9	0.07	0.04	1,122	1,122	0.04	113	113	—	6,457	6,457	0.15	0.26	3.71	6,543

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile Home Park	—	—	—	—	—	—	—	—	—	—	—	—	10,484	10,484	1.40	0.17	—	10,570
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	474	474	0.06	0.01	—	478
Total	—	—	—	—	—	—	—	—	—	—	—	—	10,958	10,958	1.47	0.18	—	11,048
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile Home Park	—	—	—	—	—	—	—	—	—	—	—	—	10,484	10,484	1.40	0.17	—	10,570
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	474	474	0.06	0.01	—	478
Total	—	—	—	—	—	—	—	—	—	—	—	—	10,958	10,958	1.47	0.18	—	11,048
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Mobile Home Park	—	—	—	—	—	—	—	—	—	—	—	—	1,736	1,736	0.23	0.03	—	1,750
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	78.5	78.5	0.01	< 0.005	—	79.1
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,814	1,814	0.24	0.03	—	1,829

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile Home Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile Home Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile Home Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	8.64	8.64	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	1.47	1.47	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	5.59	5.29	0.57	61.5	< 0.005	0.03	—	0.03	0.02	—	0.02	—	164	164	0.01	< 0.005	—	164
Total	15.7	15.4	0.57	61.5	< 0.005	0.03	—	0.03	0.02	—	0.02	0.00	164	164	0.01	< 0.005	—	164
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	8.64	8.64	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architectural	1.47	1.47	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	10.1	10.1	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	1.58	1.58	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.27	0.27	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.75	0.71	0.08	8.31	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	20.0	20.0	< 0.005	< 0.005	—	20.1
Total	2.60	2.56	0.08	8.31	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	20.0	20.0	< 0.005	< 0.005	—	20.1

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile Home Park	—	—	—	—	—	—	—	—	—	—	—	31.4	54.0	85.4	3.23	0.08	—	189
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	31.4	54.0	85.4	3.23	0.08	—	189

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile Home Park	—	—	—	—	—	—	—	—	—	—	—	31.4	54.0	85.4	3.23	0.08	—	189
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	31.4	54.0	85.4	3.23	0.08	—	189
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile Home Park	—	—	—	—	—	—	—	—	—	—	—	5.21	8.94	14.1	0.53	0.01	—	31.3
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	5.21	8.94	14.1	0.53	0.01	—	31.3

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile Home Park	—	—	—	—	—	—	—	—	—	—	—	430	0.00	430	43.0	0.00	—	1,504
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	430	0.00	430	43.0	0.00	—	1,504

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile Home Park	—	—	—	—	—	—	—	—	—	—	—	430	0.00	430	43.0	0.00	—	1,504
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	430	0.00	430	43.0	0.00	—	1,504
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile Home Park	—	—	—	—	—	—	—	—	—	—	—	71.2	0.00	71.2	7.12	0.00	—	249
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	71.2	0.00	71.2	7.12	0.00	—	249

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile Home Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.87	2.87
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.87	2.87
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Mobile Home Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.87	2.87
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.87	2.87
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile Home Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.48	0.48
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.48	0.48

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipm Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Remove	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Mobile Home Park	3,669	3,377	3,108	1,294,592	57,423	52,862	48,640	20,263,514
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Mobile Home Park	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	486
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0

Pellet Wood Stoves	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
811598.63625	270,533	0.00	0.00	48,090

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	270

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Mobile Home Park	15,523,250	247	0.0330	0.0040	0.00
Parking Lot	702,118	247	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Mobile Home Park	16,407,139	680,239
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Mobile Home Park	798	—
Parking Lot	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Mobile Home Park	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Mobile Home Park	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit

Temperature and Extreme Heat	32.8	annual days of extreme heat
Extreme Precipitation	0.00	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.19	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	11.6
AQ-PM	19.1
AQ-DPM	9.09
Drinking Water	30.6
Lead Risk Housing	50.8
Pesticides	90.5
Toxic Releases	7.58

Traffic	3.06
Effect Indicators	—
CleanUp Sites	74.2
Groundwater	77.9
Haz Waste Facilities/Generators	93.2
Impaired Water Bodies	100.0
Solid Waste	86.5
Sensitive Population	—
Asthma	87.6
Cardio-vascular	83.2
Low Birth Weights	26.9
Socioeconomic Factor Indicators	—
Education	82.7
Housing	51.4
Linguistic	88.8
Poverty	94.9
Unemployment	99.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	16.66880534
Employed	7.173104068
Median HI	5.299627871
Education	—
Bachelor's or higher	5.017323239
High school enrollment	16.8741178

Preschool enrollment	68.89516233
Transportation	—
Auto Access	18.40112922
Active commuting	51.10997049
Social	—
2-parent households	13.28114975
Voting	16.79712563
Neighborhood	—
Alcohol availability	70.25535737
Park access	33.85089183
Retail density	4.311561658
Supermarket access	49.58295907
Tree canopy	0.782753753
Housing	—
Homeownership	38.3036058
Housing habitability	30.96368536
Low-inc homeowner severe housing cost burden	26.76761196
Low-inc renter severe housing cost burden	52.89362248
Uncrowded housing	38.58591043
Health Outcomes	—
Insured adults	21.00603105
Arthritis	0.0
Asthma ER Admissions	30.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0

Diagnosed Diabetes	0.0
Life Expectancy at Birth	41.7
Cognitively Disabled	50.3
Physically Disabled	19.5
Heart Attack ER Admissions	46.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	54.3
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	14.1
Elderly	42.0
English Speaking	18.7
Foreign-born	65.3
Outdoor Workers	5.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	85.8
Traffic Density	4.9
Traffic Access	23.0
Other Indices	—

Hardship	92.9
Other Decision Support	—
2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	82.0
Healthy Places Index Score for Project Location (b)	11.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Land use data are based on applicant-provided buildout assumptions.
Operations: Landscape Equipment	Assumed 270 summer days for desert region.
Operations: Vehicle Data	Trip rates are based on ITE Land Use Code 240.
Operations: Road Dust	85% of roads assumed to be paved based on ICAPCD guidance and project narrative.
Operations: Hearths	Temporary housing not anticipated to provide hearths or fireplaces.

Operations: Energy Use	Land use is not anticipated to incorporate the use of natural gas. Default natural gas consumption was converted to electricity.
Operations: Water and Waste Water	Water demand is based on applicant-provided figures.

Lithium Valley Operation - Phase 1 - Wastewater Treatment Plant Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Lithium Valley Operation - Phase 1 - Wastewater Treatment Plant
Operational Year	2035
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	4.80
Location	33.18829759139308, -115.6026869228474
County	Imperial
City	Unincorporated
Air District	Imperial County APCD
Air Basin	Salton Sea
TAZ	5600
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
General Heavy Industry	277	1000sqft	146	276,958	55,392	—	—	—
Parking Lot	554	1000sqft	12.7	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	40.0	36.9	59.0	329	0.89	1.75	12,716	12,717	1.72	1,277	1,278	392	98,428	98,820	42.6	3.70	178	101,167
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	34.6	31.8	61.9	211	0.79	1.73	12,716	12,717	1.70	1,277	1,278	392	88,053	88,445	42.7	3.85	74.8	90,732
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	24.0	22.2	24.8	170	0.56	0.67	8,700	8,701	0.64	874	874	392	64,756	65,148	42.0	2.80	104	67,135
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.37	4.06	4.52	31.1	0.10	0.12	1,588	1,588	0.12	159	160	64.8	10,721	10,786	6.95	0.46	17.2	11,115

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	22.3	20.3	23.4	296	0.84	0.46	12,716	12,716	0.43	1,277	1,277	—	85,359	85,359	1.69	3.06	106	86,420

Area	9.23	9.07	0.10	12.0	< 0.005	0.02	—	0.02	0.02	—	0.02	—	49.5	49.5	< 0.005	< 0.005	—	49.7
Energy	0.27	0.13	2.42	2.03	0.01	0.18	—	0.18	0.18	—	0.18	—	8,893	8,893	1.06	0.10	—	8,950
Water	—	—	—	—	—	—	—	—	—	—	—	207	349	556	21.2	0.51	—	1,238
Waste	—	—	—	—	—	—	—	—	—	—	—	185	0.00	185	18.5	0.00	—	648
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	72.1	72.1
Stationary	8.11	7.38	33.0	18.8	0.04	1.09	0.00	1.09	1.09	0.00	1.09	0.00	3,778	3,778	0.15	0.03	0.00	3,790
Total	40.0	36.9	59.0	329	0.89	1.75	12,716	12,717	1.72	1,277	1,278	392	98,428	98,820	42.6	3.70	178	101,167
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	19.1	17.2	26.5	190	0.74	0.46	12,716	12,716	0.43	1,277	1,277	—	75,034	75,034	1.72	3.20	2.75	76,034
Area	7.09	7.09	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.27	0.13	2.42	2.03	0.01	0.18	—	0.18	0.18	—	0.18	—	8,893	8,893	1.06	0.10	—	8,950
Water	—	—	—	—	—	—	—	—	—	—	—	207	349	556	21.2	0.51	—	1,238
Waste	—	—	—	—	—	—	—	—	—	—	—	185	0.00	185	18.5	0.00	—	648
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	72.1	72.1
Stationary	8.11	7.38	33.0	18.8	0.04	1.09	0.00	1.09	1.09	0.00	1.09	0.00	3,778	3,778	0.15	0.03	0.00	3,790
Total	34.6	31.8	61.9	211	0.79	1.73	12,716	12,717	1.70	1,277	1,278	392	88,053	88,445	42.7	3.85	74.8	90,732
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	13.9	12.5	17.7	157	0.54	0.32	8,700	8,701	0.30	874	874	—	54,960	54,960	1.16	2.18	31.7	55,672
Area	8.68	8.55	0.07	8.91	< 0.005	0.02	—	0.02	0.01	—	0.01	—	36.6	36.6	< 0.005	< 0.005	—	36.8
Energy	0.27	0.13	2.42	2.03	0.01	0.18	—	0.18	0.18	—	0.18	—	8,893	8,893	1.06	0.10	—	8,950
Water	—	—	—	—	—	—	—	—	—	—	—	207	349	556	21.2	0.51	—	1,238
Waste	—	—	—	—	—	—	—	—	—	—	—	185	0.00	185	18.5	0.00	—	648
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	72.1	72.1
Stationary	1.11	1.01	4.52	2.58	< 0.005	0.15	0.00	0.15	0.15	0.00	0.15	0.00	518	518	0.02	< 0.005	0.00	519
Total	24.0	22.2	24.8	170	0.56	0.67	8,700	8,701	0.64	874	874	392	64,756	65,148	42.0	2.80	104	67,135

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	2.54	2.29	3.24	28.6	0.10	0.06	1,588	1,588	0.05	159	159	—	9,099	9,099	0.19	0.36	5.25	9,217
Area	1.58	1.56	0.01	1.63	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.07	6.07	< 0.005	< 0.005	—	6.09
Energy	0.05	0.02	0.44	0.37	< 0.005	0.03	—	0.03	0.03	—	0.03	—	1,472	1,472	0.18	0.02	—	1,482
Water	—	—	—	—	—	—	—	—	—	—	—	34.2	57.8	92.0	3.51	0.08	—	205
Waste	—	—	—	—	—	—	—	—	—	—	—	30.6	0.00	30.6	3.06	0.00	—	107
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	11.9	11.9
Stationary	0.20	0.18	0.83	0.47	< 0.005	0.03	0.00	0.03	0.03	0.00	0.03	0.00	85.7	85.7	< 0.005	< 0.005	0.00	86.0
Total	4.37	4.06	4.52	31.1	0.10	0.12	1,588	1,588	0.12	159	160	64.8	10,721	10,786	6.95	0.46	17.2	11,115

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	22.3	20.3	23.4	296	0.84	0.46	12,716	12,716	0.43	1,277	1,277	—	85,359	85,359	1.69	3.06	106	86,420
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	22.3	20.3	23.4	296	0.84	0.46	12,716	12,716	0.43	1,277	1,277	—	85,359	85,359	1.69	3.06	106	86,420
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	19.1	17.2	26.5	190	0.74	0.46	12,716	12,716	0.43	1,277	1,277	—	75,034	75,034	1.72	3.20	2.75	76,034
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	19.1	17.2	26.5	190	0.74	0.46	12,716	12,716	0.43	1,277	1,277	—	75,034	75,034	1.72	3.20	2.75	76,034
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	2.54	2.29	3.24	28.6	0.10	0.06	1,588	1,588	0.05	159	159	—	9,099	9,099	0.19	0.36	5.25	9,217
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	2.54	2.29	3.24	28.6	0.10	0.06	1,588	1,588	0.05	159	159	—	9,099	9,099	0.19	0.36	5.25	9,217

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	5,681	5,681	0.76	0.09	—	5,728
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	328	328	0.04	0.01	—	330
Total	—	—	—	—	—	—	—	—	—	—	—	—	6,009	6,009	0.80	0.10	—	6,058
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	5,681	5,681	0.76	0.09	—	5,728
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	328	328	0.04	0.01	—	330
Total	—	—	—	—	—	—	—	—	—	—	—	—	6,009	6,009	0.80	0.10	—	6,058
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	941	941	0.13	0.02	—	948
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	54.3	54.3	0.01	< 0.005	—	54.7
Total	—	—	—	—	—	—	—	—	—	—	—	—	995	995	0.13	0.02	—	1,003

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.27	0.13	2.42	2.03	0.01	0.18	—	0.18	0.18	—	0.18	—	2,883	2,883	0.26	0.01	—	2,891
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.27	0.13	2.42	2.03	0.01	0.18	—	0.18	0.18	—	0.18	—	2,883	2,883	0.26	0.01	—	2,891
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.27	0.13	2.42	2.03	0.01	0.18	—	0.18	0.18	—	0.18	—	2,883	2,883	0.26	0.01	—	2,891

Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.27	0.13	2.42	2.03	0.01	0.18	—	0.18	0.18	—	0.18	—	2,883	2,883	0.26	0.01	—	2,891
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.05	0.02	0.44	0.37	< 0.005	0.03	—	0.03	0.03	—	0.03	—	477	477	0.04	< 0.005	—	479
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.05	0.02	0.44	0.37	< 0.005	0.03	—	0.03	0.03	—	0.03	—	477	477	0.04	< 0.005	—	479

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	5.97	5.97	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	1.12	1.12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	2.15	1.98	0.10	12.0	< 0.005	0.02	—	0.02	0.02	—	0.02	—	49.5	49.5	< 0.005	< 0.005	—	49.7
Total	9.23	9.07	0.10	12.0	< 0.005	0.02	—	0.02	0.02	—	0.02	—	49.5	49.5	< 0.005	< 0.005	—	49.7
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Consum Products	5.97	5.97	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	1.12	1.12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	7.09	7.09	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	1.09	1.09	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.20	0.20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.29	0.27	0.01	1.63	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.07	6.07	< 0.005	< 0.005	—	6.09
Total	1.58	1.56	0.01	1.63	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.07	6.07	< 0.005	< 0.005	—	6.09

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	207	349	556	21.2	0.51	—	1,238

Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	207	349	556	21.2	0.51	—	1,238
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	207	349	556	21.2	0.51	—	1,238
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	207	349	556	21.2	0.51	—	1,238
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	34.2	57.8	92.0	3.51	0.08	—	205
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	34.2	57.8	92.0	3.51	0.08	—	205

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	185	0.00	185	18.5	0.00	—	648
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Total	—	—	—	—	—	—	—	—	—	—	—	185	0.00	185	18.5	0.00	—	648
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	185	0.00	185	18.5	0.00	—	648
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	185	0.00	185	18.5	0.00	—	648
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	30.6	0.00	30.6	3.06	0.00	—	107
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	30.6	0.00	30.6	3.06	0.00	—	107

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	72.1	72.1
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	72.1	72.1
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	72.1	72.1
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	72.1	72.1
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	11.9	11.9
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	11.9	11.9

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipm Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	8.11	7.38	33.0	18.8	0.04	1.09	0.00	1.09	1.09	0.00	1.09	0.00	3,778	3,778	0.15	0.03	0.00	3,790
Total	8.11	7.38	33.0	18.8	0.04	1.09	0.00	1.09	1.09	0.00	1.09	0.00	3,778	3,778	0.15	0.03	0.00	3,790
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	8.11	7.38	33.0	18.8	0.04	1.09	0.00	1.09	1.09	0.00	1.09	0.00	3,778	3,778	0.15	0.03	0.00	3,790
Total	8.11	7.38	33.0	18.8	0.04	1.09	0.00	1.09	1.09	0.00	1.09	0.00	3,778	3,778	0.15	0.03	0.00	3,790
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.20	0.18	0.83	0.47	< 0.005	0.03	0.00	0.03	0.03	0.00	0.03	0.00	85.7	85.7	< 0.005	< 0.005	0.00	86.0
Total	0.20	0.18	0.83	0.47	< 0.005	0.03	0.00	0.03	0.03	0.00	0.03	0.00	85.7	85.7	< 0.005	< 0.005	0.00	86.0

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Remove	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
General Heavy Industry	3,404	5,561	4,409	1,407,311	69,331	113,277	89,809	28,665,156
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	415,437	138,479	33,235

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	270

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
General Heavy Industry	8,412,440	247	0.0330	0.0040	8,996,871
Parking Lot	485,234	247	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
General Heavy Industry	107,795,511	1,908,378
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
General Heavy Industry	343	—
Parking Lot	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
General Heavy Industry	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
Emergency Generator	Diesel	3.00	1.00	50.0	1,500	0.73

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	32.8	annual days of extreme heat
Extreme Precipitation	0.00	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.19	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A

Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	11.6
AQ-PM	19.1
AQ-DPM	9.09
Drinking Water	30.6
Lead Risk Housing	50.8
Pesticides	90.5
Toxic Releases	7.58
Traffic	3.06
Effect Indicators	—
CleanUp Sites	74.2
Groundwater	77.9

Haz Waste Facilities/Generators	93.2
Impaired Water Bodies	100.0
Solid Waste	86.5
Sensitive Population	—
Asthma	87.6
Cardio-vascular	83.2
Low Birth Weights	26.9
Socioeconomic Factor Indicators	—
Education	82.7
Housing	51.4
Linguistic	88.8
Poverty	94.9
Unemployment	99.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	16.66880534
Employed	7.173104068
Median HI	5.299627871
Education	—
Bachelor's or higher	5.017323239
High school enrollment	16.8741178
Preschool enrollment	68.89516233
Transportation	—
Auto Access	18.40112922
Active commuting	51.10997049

Social	—
2-parent households	13.28114975
Voting	16.79712563
Neighborhood	—
Alcohol availability	70.25535737
Park access	33.85089183
Retail density	4.311561658
Supermarket access	49.58295907
Tree canopy	0.782753753
Housing	—
Homeownership	38.3036058
Housing habitability	30.96368536
Low-inc homeowner severe housing cost burden	26.76761196
Low-inc renter severe housing cost burden	52.89362248
Uncrowded housing	38.58591043
Health Outcomes	—
Insured adults	21.00603105
Arthritis	0.0
Asthma ER Admissions	30.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	41.7
Cognitively Disabled	50.3
Physically Disabled	19.5

Heart Attack ER Admissions	46.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	54.3
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	14.1
Elderly	42.0
English Speaking	18.7
Foreign-born	65.3
Outdoor Workers	5.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	85.8
Traffic Density	4.9
Traffic Access	23.0
Other Indices	—
Hardship	92.9
Other Decision Support	—
2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	82.0
Healthy Places Index Score for Project Location (b)	11.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Land use data are based on applicant-provided buildout assumptions.
Operations: Vehicle Data	Trip rates are based on ITE Land Use Code 170.
Operations: Landscape Equipment	Assumed 270 summer days for desert region.
Operations: Emergency Generators and Fire Pumps	Assumed 3 back-up generators operating 1 hour/day and 50 hours/year for maintenance and testing.
Operations: Road Dust	85% of roads assumed to be paved based on ICAPCD guidance.
Operations: Water and Waste Water	Water data are based on applicant-provided calculations for the land use.

Lithium Valley Operation - Phase 1 - Water Storage Facility Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Lithium Valley Operation - Phase 1 - Water Storage Facility
Operational Year	2035
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	4.80
Location	33.18829759139308, -115.6026869228474
County	Imperial
City	Unincorporated
Air District	Imperial County APCD
Air Basin	Salton Sea
TAZ	5600
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Parking Lot	1,270	1000sqft	29.2	0.00	25,403	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.25	0.25	0.01	0.12	< 0.005	< 0.005	5.39	5.39	< 0.005	0.54	0.54	0.00	4,308	4,308	0.57	0.07	0.04	4,343
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.25	0.25	0.01	0.08	< 0.005	< 0.005	5.39	5.39	< 0.005	0.54	0.54	0.00	4,303	4,303	0.57	0.07	< 0.005	4,339
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.25	0.25	0.01	0.07	< 0.005	< 0.005	3.80	3.80	< 0.005	0.38	0.38	0.00	4,295	4,295	0.57	0.07	0.01	4,331
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.05	0.05	< 0.005	0.01	< 0.005	< 0.005	0.69	0.69	< 0.005	0.07	0.07	0.00	711	711	0.09	0.01	< 0.005	717

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.01	0.01	0.01	0.12	< 0.005	< 0.005	5.39	5.39	< 0.005	0.54	0.54	—	36.1	36.1	< 0.005	< 0.005	0.04	36.5

Area	0.25	0.25	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	3,472	3,472	0.46	0.06	—	3,500
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	799	799	0.11	0.01	—	806
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.25	0.25	0.01	0.12	< 0.005	< 0.005	5.39	5.39	< 0.005	0.54	0.54	0.00	4,308	4,308	0.57	0.07	0.04	4,343
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.01	0.01	0.01	0.08	< 0.005	< 0.005	5.39	5.39	< 0.005	0.54	0.54	—	31.7	31.7	< 0.005	< 0.005	< 0.005	32.1
Area	0.25	0.25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	3,472	3,472	0.46	0.06	—	3,500
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	799	799	0.11	0.01	—	806
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.25	0.25	0.01	0.08	< 0.005	< 0.005	5.39	5.39	< 0.005	0.54	0.54	0.00	4,303	4,303	0.57	0.07	< 0.005	4,339
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.01	< 0.005	0.01	0.07	< 0.005	< 0.005	3.80	3.80	< 0.005	0.38	0.38	—	23.9	23.9	< 0.005	< 0.005	0.01	24.3
Area	0.25	0.25	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	3,472	3,472	0.46	0.06	—	3,500
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	799	799	0.11	0.01	—	806
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.25	0.25	0.01	0.07	< 0.005	< 0.005	3.80	3.80	< 0.005	0.38	0.38	0.00	4,295	4,295	0.57	0.07	0.01	4,331
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	0.69	0.69	< 0.005	0.07	0.07	—	3.96	3.96	< 0.005	< 0.005	< 0.005	4.02
Area	0.04	0.04	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	575	575	0.08	0.01	—	580
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	132	132	0.02	< 0.005	—	133
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.05	0.05	< 0.005	0.01	< 0.005	< 0.005	0.69	0.69	< 0.005	0.07	0.07	0.00	711	711	0.09	0.01	< 0.005	717

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Mobile source emissions results are presented in Sections 2.6. No further detailed breakdown of emissions is available.

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	751	751	0.10	0.01	—	758
undefined	—	—	—	—	—	—	—	—	—	—	—	—	2,721	2,721	0.36	0.04	—	2,743
Total	—	—	—	—	—	—	—	—	—	—	—	—	3,472	3,472	0.46	0.06	—	3,500
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	751	751	0.10	0.01	—	758

undefine	—	—	—	—	—	—	—	—	—	—	—	—	2,721	2,721	0.36	0.04	—	2,743
Total	—	—	—	—	—	—	—	—	—	—	—	—	3,472	3,472	0.46	0.06	—	3,500
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	124	124	0.02	< 0.005	—	125
undefined	—	—	—	—	—	—	—	—	—	—	—	—	450	450	0.06	0.01	—	454
Total	—	—	—	—	—	—	—	—	—	—	—	—	575	575	0.08	0.01	—	580

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.10	0.10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.15	0.15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.25	0.25	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.10	0.10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.15	0.15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.25	0.25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.02	0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architect Coatings	0.03	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.04	0.04	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	799	799	0.11	0.01	—	806
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	799	799	0.11	0.01	—	806
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	799	799	0.11	0.01	—	806
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	799	799	0.11	0.01	—	806
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	132	132	0.02	< 0.005	—	133
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	132	132	0.02	< 0.005	—	133

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Pumps	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Pumps	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Pumps	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Total all Land Uses	2.00	0.00	0.00	521	48.0	0.00	0.00	12,514

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	0.00	0.00	76,208

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00

Summer Days	day/yr	270

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Parking Lot	1,112,632	247	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Parking Lot	0.00	367,833,765

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Parking Lot	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Pumps	Electric	Average	5.00	8.00	500	0.74

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	32.8	annual days of extreme heat
Extreme Precipitation	0.00	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.19	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A

Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	11.6
AQ-PM	19.1
AQ-DPM	9.09
Drinking Water	30.6
Lead Risk Housing	50.8
Pesticides	90.5
Toxic Releases	7.58
Traffic	3.06
Effect Indicators	—
CleanUp Sites	74.2
Groundwater	77.9
Haz Waste Facilities/Generators	93.2
Impaired Water Bodies	100.0
Solid Waste	86.5
Sensitive Population	—
Asthma	87.6
Cardio-vascular	83.2
Low Birth Weights	26.9
Socioeconomic Factor Indicators	—
Education	82.7
Housing	51.4
Linguistic	88.8
Poverty	94.9
Unemployment	99.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	16.66880534
Employed	7.173104068
Median HI	5.299627871
Education	—
Bachelor's or higher	5.017323239
High school enrollment	16.8741178
Preschool enrollment	68.89516233
Transportation	—
Auto Access	18.40112922
Active commuting	51.10997049
Social	—
2-parent households	13.28114975
Voting	16.79712563
Neighborhood	—
Alcohol availability	70.25535737
Park access	33.85089183
Retail density	4.311561658
Supermarket access	49.58295907
Tree canopy	0.782753753
Housing	—
Homeownership	38.3036058
Housing habitability	30.96368536
Low-inc homeowner severe housing cost burden	26.76761196
Low-inc renter severe housing cost burden	52.89362248

Uncrowded housing	38.58591043
Health Outcomes	—
Insured adults	21.00603105
Arthritis	0.0
Asthma ER Admissions	30.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	41.7
Cognitively Disabled	50.3
Physically Disabled	19.5
Heart Attack ER Admissions	46.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	54.3
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0

Children	14.1
Elderly	42.0
English Speaking	18.7
Foreign-born	65.3
Outdoor Workers	5.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	85.8
Traffic Density	4.9
Traffic Access	23.0
Other Indices	—
Hardship	92.9
Other Decision Support	—
2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	82.0
Healthy Places Index Score for Project Location (b)	11.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Land use data are based on applicant-provided buildout assumptions.
Operations: Vehicle Data	Trip rates are based on ITE Land Use Code 760.
Operations: Landscape Equipment	Assumed 270 summer days for desert region.
Operations: Off-Road Equipment	Assumed pumps as part of project operations.
Operations: Road Dust	85% of roads assumed to be paved based on ICAPCD guidance.
Operations: Water and Waste Water	Water data are based on applicant-provided calculations for the land use.

Lithium Valley Operation - Phase 1 - Wholesale Distribution Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Lithium Valley Operation - Phase 1 - Wholesale Distribution
Operational Year	2035
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	4.80
Location	33.18829759139308, -115.6026869228474
County	Imperial
City	Unincorporated
Air District	Imperial County APCD
Air Basin	Salton Sea
TAZ	5600
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Unrefrigerated Warehouse-No Rail	934	1000sqft	343	933,630	466,815	—	—	—

Unrefrigerated Warehouse-Rail	354	1000sqft	130	354,136	177,068	—	—	—
Refrigerated Warehouse-No Rail	126	1000sqft	46.2	125,671	62,835	—	—	—
Refrigerated Warehouse-Rail	102	1000sqft	37.3	101,582	50,791	—	—	—
Parking Lot	7,575	1000sqft	174	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	59.1	56.9	64.7	170	0.83	2.15	6,923	6,925	2.07	696	698	842	142,777	143,619	92.7	9.56	6,164	154,951
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	46.8	45.5	69.7	67.8	0.79	2.03	6,923	6,925	1.98	696	698	842	138,888	139,730	92.7	9.61	6,059	150,971
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	54.1	52.3	65.2	126	0.80	1.91	6,832	6,834	1.84	687	689	842	139,847	140,689	92.7	9.59	6,103	151,966
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	9.87	9.54	11.9	22.9	0.15	0.35	1,247	1,247	0.34	125	126	139	23,153	23,293	15.3	1.59	1,010	25,160

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	5.08	4.36	51.9	93.6	0.78	1.20	6,923	6,924	1.15	696	697	—	80,903	80,903	0.61	8.52	108	83,564
Area	51.4	50.5	0.55	65.9	< 0.005	0.12	—	0.12	0.09	—	0.09	—	271	271	0.01	< 0.005	—	272
Energy	0.85	0.43	7.74	6.51	0.05	0.59	—	0.59	0.59	—	0.59	—	60,636	60,636	7.70	0.85	—	61,082
Water	—	—	—	—	—	—	—	—	—	—	—	74.6	128	203	7.67	0.18	—	449
Waste	—	—	—	—	—	—	—	—	—	—	—	768	0.00	768	76.7	0.00	—	2,685
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6,056	6,056
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	1.80	1.64	4.59	4.18	0.01	0.24	0.00	0.24	0.24	0.00	0.24	0.00	840	840	0.03	0.01	0.00	842
Total	59.1	56.9	64.7	170	0.83	2.15	6,923	6,925	2.07	696	698	842	142,777	143,619	92.7	9.56	6,164	154,951
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	4.48	3.78	57.4	57.1	0.74	1.20	6,923	6,924	1.15	696	697	—	77,284	77,284	0.62	8.57	2.79	79,856
Area	39.7	39.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.85	0.43	7.74	6.51	0.05	0.59	—	0.59	0.59	—	0.59	—	60,636	60,636	7.70	0.85	—	61,082
Water	—	—	—	—	—	—	—	—	—	—	—	74.6	128	203	7.67	0.18	—	449
Waste	—	—	—	—	—	—	—	—	—	—	—	768	0.00	768	76.7	0.00	—	2,685
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6,056	6,056
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	1.80	1.64	4.59	4.18	0.01	0.24	0.00	0.24	0.24	0.00	0.24	0.00	840	840	0.03	0.01	0.00	842
Total	46.8	45.5	69.7	67.8	0.79	2.03	6,923	6,925	1.98	696	698	842	138,888	139,730	92.7	9.61	6,059	150,971

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	4.66	3.95	56.4	69.8	0.75	1.20	6,832	6,833	1.15	687	688	—	78,767	78,767	0.61	8.55	46.4	81,376
Area	48.3	47.7	0.41	48.7	< 0.005	0.09	—	0.09	0.07	—	0.07	—	200	200	0.01	< 0.005	—	201
Energy	0.85	0.43	7.74	6.51	0.05	0.59	—	0.59	0.59	—	0.59	—	60,636	60,636	7.70	0.85	—	61,082
Water	—	—	—	—	—	—	—	—	—	—	—	74.6	128	203	7.67	0.18	—	449
Waste	—	—	—	—	—	—	—	—	—	—	—	768	0.00	768	76.7	0.00	—	2,685
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6,056	6,056
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	0.25	0.22	0.63	0.57	< 0.005	0.03	0.00	0.03	0.03	0.00	0.03	0.00	115	115	< 0.005	< 0.005	0.00	115
Total	54.1	52.3	65.2	126	0.80	1.91	6,832	6,834	1.84	687	689	842	139,847	140,689	92.7	9.59	6,103	151,966
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.85	0.72	10.3	12.7	0.14	0.22	1,247	1,247	0.21	125	126	—	13,041	13,041	0.10	1.42	7.69	13,473
Area	8.82	8.70	0.07	8.90	< 0.005	0.02	—	0.02	0.01	—	0.01	—	33.2	33.2	< 0.005	< 0.005	—	33.3
Energy	0.16	0.08	1.41	1.19	0.01	0.11	—	0.11	0.11	—	0.11	—	10,039	10,039	1.27	0.14	—	10,113
Water	—	—	—	—	—	—	—	—	—	—	—	12.4	21.2	33.6	1.27	0.03	—	74.4
Waste	—	—	—	—	—	—	—	—	—	—	—	127	0.00	127	12.7	0.00	—	445
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,003	1,003
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	0.05	0.04	0.11	0.10	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	19.0	19.0	< 0.005	< 0.005	0.00	19.1
Total	9.87	9.54	11.9	22.9	0.15	0.35	1,247	1,247	0.34	125	126	139	23,153	23,293	15.3	1.59	1,010	25,160

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	3.07	2.83	2.51	71.2	0.21	0.05	3,573	3,573	0.05	359	359	—	21,650	21,650	0.23	0.33	22.6	21,776
Unrefrigerated Warehouse-Rail	1.24	0.89	38.1	9.93	0.41	0.89	2,229	2,230	0.85	225	225	—	43,780	43,780	0.27	6.33	63.6	45,737
Refrigerated Warehouse-No Rail	0.41	0.38	0.34	9.59	0.03	0.01	481	481	0.01	48.3	48.3	—	2,914	2,914	0.03	0.04	3.04	2,931
Refrigerated Warehouse-Rail	0.36	0.26	10.9	2.85	0.12	0.25	639	640	0.24	64.4	64.7	—	12,558	12,558	0.08	1.82	18.3	13,119
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	5.08	4.36	51.9	93.6	0.78	1.20	6,923	6,924	1.15	696	697	—	80,903	80,903	0.61	8.52	108	83,564
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	2.61	2.38	2.87	39.0	0.18	0.05	3,573	3,573	0.05	359	359	—	18,442	18,442	0.24	0.36	0.59	18,556

Unrefrigerated	1.18	0.84	42.0	10.0	0.41	0.89	2,229	2,230	0.85	225	225	—	43,797	43,797	0.27	6.34	1.65	45,695
Refrigerated Warehouse-No Rail	0.35	0.32	0.39	5.25	0.02	0.01	481	481	0.01	48.3	48.3	—	2,482	2,482	0.03	0.05	0.08	2,498
Refrigerated Warehouse-Rail	0.34	0.24	12.1	2.87	0.12	0.25	639	640	0.24	64.4	64.7	—	12,563	12,563	0.08	1.82	0.47	13,107
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	4.48	3.78	57.4	57.1	0.74	1.20	6,923	6,924	1.15	696	697	—	77,284	77,284	0.62	8.57	2.79	79,856
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.50	0.46	0.49	9.17	0.04	0.01	644	644	0.01	64.6	64.6	—	3,271	3,271	0.04	0.06	1.61	3,291
Unrefrigerated Warehouse-Rail	0.22	0.16	7.56	1.82	0.08	0.16	402	402	0.16	40.5	40.6	—	7,249	7,249	0.04	1.05	4.55	7,568
Refrigerated Warehouse-No Rail	0.07	0.06	0.07	1.23	< 0.005	< 0.005	86.6	86.6	< 0.005	8.70	8.70	—	440	440	0.01	0.01	0.22	443
Refrigerated Warehouse-Rail	0.06	0.05	2.17	0.52	0.02	0.05	115	115	0.04	11.6	11.6	—	2,079	2,079	0.01	0.30	1.30	2,171
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.85	0.72	10.3	12.7	0.14	0.22	1,247	1,247	0.21	125	126	—	13,041	13,041	0.10	1.42	7.69	13,473

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	7,071	7,071	0.95	0.11	—	7,129
Unrefrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	—	2,682	2,682	0.36	0.04	—	2,704
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	1,813	1,813	0.24	0.03	—	1,828
Refrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	—	1,465	1,465	0.20	0.02	—	1,477
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	4,482	4,482	0.60	0.07	—	4,518
undefined	—	—	—	—	—	—	—	—	—	—	—	—	33,882	33,882	4.54	0.55	—	34,159
Total	—	—	—	—	—	—	—	—	—	—	—	—	51,395	51,395	6.88	0.83	—	51,816
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unrefrigerated	—	—	—	—	—	—	—	—	—	—	—	—	7,071	7,071	0.95	0.11	—	7,129
Unrefrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	—	2,682	2,682	0.36	0.04	—	2,704
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	1,813	1,813	0.24	0.03	—	1,828
Refrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	—	1,465	1,465	0.20	0.02	—	1,477
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	4,482	4,482	0.60	0.07	—	4,518
undefined	—	—	—	—	—	—	—	—	—	—	—	—	33,882	33,882	4.54	0.55	—	34,159
Total	—	—	—	—	—	—	—	—	—	—	—	—	51,395	51,395	6.88	0.83	—	51,816
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	1,171	1,171	0.16	0.02	—	1,180
Unrefrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	—	444	444	0.06	0.01	—	448
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	300	300	0.04	< 0.005	—	303

Refrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	—	243	243	0.03	< 0.005	—	245
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	742	742	0.10	0.01	—	748
undefined	—	—	—	—	—	—	—	—	—	—	—	—	5,610	5,610	0.75	0.09	—	5,655
Total	—	—	—	—	—	—	—	—	—	—	—	—	8,509	8,509	1.14	0.14	—	8,579

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.53	0.26	4.79	4.02	0.03	0.36	—	0.36	0.36	—	0.36	—	5,711	5,711	0.51	0.01	—	5,727
Unrefrigerated Warehouse-Rail	0.20	0.10	1.82	1.53	0.01	0.14	—	0.14	0.14	—	0.14	—	2,166	2,166	0.19	< 0.005	—	2,172
Refrigerated Warehouse-No Rail	0.07	0.03	0.63	0.53	< 0.005	0.05	—	0.05	0.05	—	0.05	—	754	754	0.07	< 0.005	—	756
Refrigerated Warehouse-Rail	0.06	0.03	0.51	0.43	< 0.005	0.04	—	0.04	0.04	—	0.04	—	610	610	0.05	< 0.005	—	611
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Total	0.85	0.43	7.74	6.51	0.05	0.59	—	0.59	0.59	—	0.59	—	9,241	9,241	0.82	0.02	—	9,266
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.53	0.26	4.79	4.02	0.03	0.36	—	0.36	0.36	—	0.36	—	5,711	5,711	0.51	0.01	—	5,727
Unrefrigerated Warehouse-Rail	0.20	0.10	1.82	1.53	0.01	0.14	—	0.14	0.14	—	0.14	—	2,166	2,166	0.19	< 0.005	—	2,172
Refrigerated Warehouse-No Rail	0.07	0.03	0.63	0.53	< 0.005	0.05	—	0.05	0.05	—	0.05	—	754	754	0.07	< 0.005	—	756
Refrigerated Warehouse-Rail	0.06	0.03	0.51	0.43	< 0.005	0.04	—	0.04	0.04	—	0.04	—	610	610	0.05	< 0.005	—	611
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.85	0.43	7.74	6.51	0.05	0.59	—	0.59	0.59	—	0.59	—	9,241	9,241	0.82	0.02	—	9,266
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.10	0.05	0.87	0.73	0.01	0.07	—	0.07	0.07	—	0.07	—	946	946	0.08	< 0.005	—	948
Unrefrigerated Warehouse-Rail	0.04	0.02	0.33	0.28	< 0.005	0.03	—	0.03	0.03	—	0.03	—	359	359	0.03	< 0.005	—	360

Refrigerated Warehouse-No	0.01	0.01	0.12	0.10	< 0.005	0.01	—	0.01	0.01	—	0.01	—	125	125	0.01	< 0.005	—	125
Refrigerated Warehouse-Rail	0.01	0.01	0.09	0.08	< 0.005	0.01	—	0.01	0.01	—	0.01	—	101	101	0.01	< 0.005	—	101
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.16	0.08	1.41	1.19	0.01	0.11	—	0.11	0.11	—	0.11	—	1,530	1,530	0.14	< 0.005	—	1,534

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	33.0	33.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	6.64	6.64	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	11.7	10.8	0.55	65.9	< 0.005	0.12	—	0.12	0.09	—	0.09	—	271	271	0.01	< 0.005	—	272
Total	51.4	50.5	0.55	65.9	< 0.005	0.12	—	0.12	0.09	—	0.09	—	271	271	0.01	< 0.005	—	272
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Consum Products	33.0	33.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	6.64	6.64	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	39.7	39.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	6.03	6.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	1.21	1.21	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	1.58	1.46	0.07	8.90	< 0.005	0.02	—	0.02	0.01	—	0.01	—	33.2	33.2	< 0.005	< 0.005	—	33.3
Total	8.82	8.70	0.07	8.90	< 0.005	0.02	—	0.02	0.01	—	0.01	—	33.2	33.2	< 0.005	< 0.005	—	33.3

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	46.0	79.1	125	4.73	0.11	—	277

Unrefrig Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	17.4	30.0	47.4	1.79	0.04	—	105
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	6.19	10.6	16.8	0.64	0.02	—	37.3
Refrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	5.00	8.61	13.6	0.51	0.01	—	30.1
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	74.6	128	203	7.67	0.18	—	449
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	46.0	79.1	125	4.73	0.11	—	277
Unrefrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	17.4	30.0	47.4	1.79	0.04	—	105
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	6.19	10.6	16.8	0.64	0.02	—	37.3
Refrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	5.00	8.61	13.6	0.51	0.01	—	30.1
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	74.6	128	203	7.67	0.18	—	449

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	7.61	13.1	20.7	0.78	0.02	—	45.9
Unrefrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	2.89	4.97	7.85	0.30	0.01	—	17.4
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	1.02	1.76	2.79	0.11	< 0.005	—	6.17
Refrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	0.83	1.42	2.25	0.09	< 0.005	—	4.99
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	12.4	21.2	33.6	1.27	0.03	—	74.4

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	473	0.00	473	47.3	0.00	—	1,655

Unrefrig Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	179	0.00	179	17.9	0.00	—	628
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	63.7	0.00	63.7	6.36	0.00	—	223
Refrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	51.5	0.00	51.5	5.14	0.00	—	180
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	768	0.00	768	76.7	0.00	—	2,685
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	473	0.00	473	47.3	0.00	—	1,655
Unrefrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	179	0.00	179	17.9	0.00	—	628
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	63.7	0.00	63.7	6.36	0.00	—	223
Refrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	51.5	0.00	51.5	5.14	0.00	—	180
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	768	0.00	768	76.7	0.00	—	2,685

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	78.3	0.00	78.3	7.83	0.00	—	274
Unrefrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	29.7	0.00	29.7	2.97	0.00	—	104
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	10.5	0.00	10.5	1.05	0.00	—	36.9
Refrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	8.52	0.00	8.52	0.85	0.00	—	29.8
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	127	0.00	127	12.7	0.00	—	445

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3,349	3,349

Refriger Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2,707	2,707
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6,056	6,056
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3,349	3,349
Refrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2,707	2,707
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6,056	6,056
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	554	554
Refrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	448	448
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,003	1,003

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Rough Terrain Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Rough Terrain Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Rough Terrain Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Emergency	1.80	1.64	4.59	4.18	0.01	0.24	0.00	0.24	0.24	0.00	0.24	0.00	840	840	0.03	0.01	0.00	842
Total	1.80	1.64	4.59	4.18	0.01	0.24	0.00	0.24	0.24	0.00	0.24	0.00	840	840	0.03	0.01	0.00	842
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	1.80	1.64	4.59	4.18	0.01	0.24	0.00	0.24	0.24	0.00	0.24	0.00	840	840	0.03	0.01	0.00	842
Total	1.80	1.64	4.59	4.18	0.01	0.24	0.00	0.24	0.24	0.00	0.24	0.00	840	840	0.03	0.01	0.00	842
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.05	0.04	0.11	0.10	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	19.0	19.0	< 0.005	< 0.005	0.00	19.1
Total	0.05	0.04	0.11	0.10	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	19.0	19.0	< 0.005	< 0.005	0.00	19.1

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Unrefrigerated Warehouse-No Rail	1,307	1,307	1,307	477,085	31,832	31,832	31,832	11,618,812
Unrefrigerated Warehouse-Rail	496	496	496	180,963	19,832	19,832	19,832	7,238,530
Refrigerated Warehouse-No Rail	176	176	176	64,218	4,285	4,285	4,285	1,563,944
Refrigerated Warehouse-Rail	142	142	142	51,908	5,689	5,689	5,689	2,076,335
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	2,272,529	757,510	454,505

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	270

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Unrefrigerated Warehouse-No Rail	10,470,114	247	0.0330	0.0040	17,819,533
Unrefrigerated Warehouse-Rail	3,971,428	247	0.0330	0.0040	6,759,142
Refrigerated Warehouse-No Rail	2,684,158	247	0.0330	0.0040	2,352,914
Refrigerated Warehouse-Rail	2,169,650	247	0.0330	0.0040	1,901,900
Parking Lot	6,635,779	247	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Unrefrigerated Warehouse-No Rail	23,997,936	1,062,130

Unrefrigerated Warehouse-Rail	9,102,666	402,877
Refrigerated Warehouse-No Rail	3,230,229	142,967
Refrigerated Warehouse-Rail	2,611,053	115,563
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Unrefrigerated Warehouse-No Rail	878	—
Unrefrigerated Warehouse-Rail	333	—
Refrigerated Warehouse-No Rail	118	—
Refrigerated Warehouse-Rail	95.5	—
Parking Lot	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Refrigerated Warehouse-No Rail	Cold storage	R-404A	3,922	7.50	7.50	7.50	25.0
Refrigerated Warehouse-Rail	Cold storage	R-404A	3,922	7.50	7.50	7.50	25.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Forklifts	Electric	Average	182	24.0	200	0.20

Rough Terrain Forklifts	Electric	Average	5.00	24.0	200	0.40

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
Emergency Generator	Diesel	2.00	1.00	50.0	500	0.73

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	32.8	annual days of extreme heat
Extreme Precipitation	0.00	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.19	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A

Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	11.6
AQ-PM	19.1
AQ-DPM	9.09
Drinking Water	30.6
Lead Risk Housing	50.8
Pesticides	90.5
Toxic Releases	7.58
Traffic	3.06
Effect Indicators	—
CleanUp Sites	74.2
Groundwater	77.9
Haz Waste Facilities/Generators	93.2
Impaired Water Bodies	100.0
Solid Waste	86.5
Sensitive Population	—
Asthma	87.6
Cardio-vascular	83.2
Low Birth Weights	26.9
Socioeconomic Factor Indicators	—
Education	82.7
Housing	51.4
Linguistic	88.8
Poverty	94.9
Unemployment	99.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	16.66880534
Employed	7.173104068
Median HI	5.299627871
Education	—
Bachelor's or higher	5.017323239
High school enrollment	16.8741178
Preschool enrollment	68.89516233
Transportation	—
Auto Access	18.40112922
Active commuting	51.10997049
Social	—
2-parent households	13.28114975
Voting	16.79712563
Neighborhood	—
Alcohol availability	70.25535737
Park access	33.85089183
Retail density	4.311561658
Supermarket access	49.58295907
Tree canopy	0.782753753
Housing	—
Homeownership	38.3036058
Housing habitability	30.96368536
Low-inc homeowner severe housing cost burden	26.76761196
Low-inc renter severe housing cost burden	52.89362248

Uncrowded housing	38.58591043
Health Outcomes	—
Insured adults	21.00603105
Arthritis	0.0
Asthma ER Admissions	30.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	41.7
Cognitively Disabled	50.3
Physically Disabled	19.5
Heart Attack ER Admissions	46.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	54.3
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0

Children	14.1
Elderly	42.0
English Speaking	18.7
Foreign-born	65.3
Outdoor Workers	5.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	85.8
Traffic Density	4.9
Traffic Access	23.0
Other Indices	—
Hardship	92.9
Other Decision Support	—
2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	82.0
Healthy Places Index Score for Project Location (b)	11.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Land use data are based on applicant-provided buildout assumptions.
Operations: Vehicle Data	Trip rates are based on ITE Land Use Code 154.
Operations: Landscape Equipment	Assumed 270 summer days for desert region.
Operations: Off-Road Equipment	Assumed forklifts and yard trucks (modeled as rough terrain forklifts) as part of project operations.
Operations: Road Dust	All roads used by future developments projects within the Specific Plan Area would be required to be paved. Per ICAPCD guidance an assumption of 85% paved is assumed in the modeling to account for high levels of entrained dust generated from vehicle travel on paved roadways in the region.
Operations: Fleet Mix	Fleet mix adjusted for passenger vehicles (no-rail land uses) and trucks (rail land uses).
Operations: Emergency Generators and Fire Pumps	Assumed 2 back-up generators each operating 1 hour/day and 50 hours/year for maintenance and testing.
Operations: Water and Waste Water	Water data are based on applicant-provided calculations for the land use.

Lithium Valley Operation - Phase 1 - Workforce Training Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Lithium Valley Operation - Phase 1 - Workforce Training
Operational Year	2035
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	4.80
Location	33.18829759139308, -115.6026869228474
County	Imperial
City	Unincorporated
Air District	Imperial County APCD
Air Basin	Salton Sea
TAZ	5600
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
General Office Building	36.8	1000sqft	53.1	36,772	7,354	—	—	—
Parking Lot	73.5	1000sqft	1.69	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.84	2.67	1.80	22.9	0.06	0.04	911	911	0.04	91.5	91.5	23.3	7,247	7,270	2.60	0.25	7.68	7,417
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.32	2.18	2.00	13.7	0.05	0.04	911	911	0.04	91.5	91.5	23.3	6,500	6,524	2.60	0.26	0.29	6,666
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.25	2.12	1.50	13.5	0.04	0.03	681	681	0.03	68.4	68.4	23.3	5,428	5,452	2.57	0.20	2.57	5,578
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.41	0.39	0.27	2.47	0.01	0.01	124	124	0.01	12.5	12.5	3.85	899	903	0.43	0.03	0.43	923

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.60	1.46	1.68	21.2	0.06	0.03	911	911	0.03	91.5	91.5	—	6,118	6,118	0.12	0.22	7.59	6,194

Area	1.23	1.20	0.01	1.60	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.58	6.58	< 0.005	< 0.005	—	6.60
Energy	0.01	0.01	0.11	0.09	< 0.005	0.01	—	0.01	0.01	—	0.01	—	1,114	1,114	0.14	0.02	—	1,123
Water	—	—	—	—	—	—	—	—	—	—	—	4.83	8.19	13.0	0.50	0.01	—	29.0
Waste	—	—	—	—	—	—	—	—	—	—	—	18.4	0.00	18.4	1.84	0.00	—	64.5
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.09	0.09
Total	2.84	2.67	1.80	22.9	0.06	0.04	911	911	0.04	91.5	91.5	23.3	7,247	7,270	2.60	0.25	7.68	7,417
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.37	1.23	1.90	13.6	0.05	0.03	911	911	0.03	91.5	91.5	—	5,378	5,378	0.12	0.23	0.20	5,449
Area	0.94	0.94	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.01	0.01	0.11	0.09	< 0.005	0.01	—	0.01	0.01	—	0.01	—	1,114	1,114	0.14	0.02	—	1,123
Water	—	—	—	—	—	—	—	—	—	—	—	4.83	8.19	13.0	0.50	0.01	—	29.0
Waste	—	—	—	—	—	—	—	—	—	—	—	18.4	0.00	18.4	1.84	0.00	—	64.5
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.09	0.09
Total	2.32	2.18	2.00	13.7	0.05	0.04	911	911	0.04	91.5	91.5	23.3	6,500	6,524	2.60	0.26	0.29	6,666
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.09	0.98	1.39	12.3	0.04	0.02	681	681	0.02	68.4	68.4	—	4,301	4,301	0.09	0.17	2.48	4,357
Area	1.15	1.14	0.01	1.18	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.86	4.86	< 0.005	< 0.005	—	4.88
Energy	0.01	0.01	0.11	0.09	< 0.005	0.01	—	0.01	0.01	—	0.01	—	1,114	1,114	0.14	0.02	—	1,123
Water	—	—	—	—	—	—	—	—	—	—	—	4.83	8.19	13.0	0.50	0.01	—	29.0
Waste	—	—	—	—	—	—	—	—	—	—	—	18.4	0.00	18.4	1.84	0.00	—	64.5
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.09	0.09
Total	2.25	2.12	1.50	13.5	0.04	0.03	681	681	0.03	68.4	68.4	23.3	5,428	5,452	2.57	0.20	2.57	5,578
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.20	0.18	0.25	2.24	0.01	< 0.005	124	124	< 0.005	12.5	12.5	—	712	712	0.02	0.03	0.41	721
Area	0.21	0.21	< 0.005	0.22	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.81	0.81	< 0.005	< 0.005	—	0.81
Energy	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	184	184	0.02	< 0.005	—	186

Water	—	—	—	—	—	—	—	—	—	—	—	0.80	1.36	2.15	0.08	< 0.005	—	4.80
Waste	—	—	—	—	—	—	—	—	—	—	—	3.05	0.00	3.05	0.30	0.00	—	10.7
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
Total	0.41	0.39	0.27	2.47	0.01	0.01	124	124	0.01	12.5	12.5	3.85	899	903	0.43	0.03	0.43	923

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	1.60	1.46	1.68	21.2	0.06	0.03	911	911	0.03	91.5	91.5	—	6,118	6,118	0.12	0.22	7.59	6,194
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	1.60	1.46	1.68	21.2	0.06	0.03	911	911	0.03	91.5	91.5	—	6,118	6,118	0.12	0.22	7.59	6,194
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	1.37	1.23	1.90	13.6	0.05	0.03	911	911	0.03	91.5	91.5	—	5,378	5,378	0.12	0.23	0.20	5,449
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	1.37	1.23	1.90	13.6	0.05	0.03	911	911	0.03	91.5	91.5	—	5,378	5,378	0.12	0.23	0.20	5,449
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Office Building	0.20	0.18	0.25	2.24	0.01	< 0.005	124	124	< 0.005	12.5	12.5	—	712	712	0.02	0.03	0.41	721
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.20	0.18	0.25	2.24	0.01	< 0.005	124	124	< 0.005	12.5	12.5	—	712	712	0.02	0.03	0.41	721

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	945	945	0.13	0.02	—	952
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	43.6	43.6	0.01	< 0.005	—	43.9
Total	—	—	—	—	—	—	—	—	—	—	—	—	988	988	0.13	0.02	—	996
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	945	945	0.13	0.02	—	952
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	43.6	43.6	0.01	< 0.005	—	43.9
Total	—	—	—	—	—	—	—	—	—	—	—	—	988	988	0.13	0.02	—	996
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	156	156	0.02	< 0.005	—	158
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	7.21	7.21	< 0.005	< 0.005	—	7.27
Total	—	—	—	—	—	—	—	—	—	—	—	—	164	164	0.02	< 0.005	—	165

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.01	0.01	0.11	0.09	< 0.005	0.01	—	0.01	0.01	—	0.01	—	126	126	0.01	< 0.005	—	127
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.01	0.01	0.11	0.09	< 0.005	0.01	—	0.01	0.01	—	0.01	—	126	126	0.01	< 0.005	—	127
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.01	0.01	0.11	0.09	< 0.005	0.01	—	0.01	0.01	—	0.01	—	126	126	0.01	< 0.005	—	127
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.01	0.01	0.11	0.09	< 0.005	0.01	—	0.01	0.01	—	0.01	—	126	126	0.01	< 0.005	—	127
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	20.9	20.9	< 0.005	< 0.005	—	21.0

Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	20.9	20.9	< 0.005	< 0.005	—	21.0

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.79	0.79	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.15	0.15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.28	0.26	0.01	1.60	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.58	6.58	< 0.005	< 0.005	—	6.60
Total	1.23	1.20	0.01	1.60	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.58	6.58	< 0.005	< 0.005	—	6.60
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.79	0.79	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.15	0.15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	0.94	0.94	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.14	0.14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.03	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.04	0.04	< 0.005	0.22	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.81	0.81	< 0.005	< 0.005	—	0.81
Total	0.21	0.21	< 0.005	0.22	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.81	0.81	< 0.005	< 0.005	—	0.81

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	4.83	8.19	13.0	0.50	0.01	—	29.0
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	4.83	8.19	13.0	0.50	0.01	—	29.0
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Office Building	—	—	—	—	—	—	—	—	—	—	—	4.83	8.19	13.0	0.50	0.01	—	29.0
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	4.83	8.19	13.0	0.50	0.01	—	29.0
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	0.80	1.36	2.15	0.08	< 0.005	—	4.80
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.80	1.36	2.15	0.08	< 0.005	—	4.80

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	18.4	0.00	18.4	1.84	0.00	—	64.5
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	18.4	0.00	18.4	1.84	0.00	—	64.5
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Office Building	—	—	—	—	—	—	—	—	—	—	—	18.4	0.00	18.4	1.84	0.00	—	64.5
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	18.4	0.00	18.4	1.84	0.00	—	64.5
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	3.05	0.00	3.05	0.30	0.00	—	10.7
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	3.05	0.00	3.05	0.30	0.00	—	10.7

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.09	0.09
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.09	0.09
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.09	0.09
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.09	0.09

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
General Office Building	399	90.5	28.7	110,129	8,119	1,842	584	2,243,196
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	55,157	18,386	4,417

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	270

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
General Office Building	1,398,514	247	0.0330	0.0040	394,060
Parking Lot	64,488	247	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
General Office Building	2,519,416	58,036
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
General Office Building	34.2	—
Parking Lot	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced

General Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
General Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	32.8	annual days of extreme heat
Extreme Precipitation	0.00	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.19	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	11.6
AQ-PM	19.1
AQ-DPM	9.09
Drinking Water	30.6
Lead Risk Housing	50.8
Pesticides	90.5
Toxic Releases	7.58
Traffic	3.06
Effect Indicators	—
CleanUp Sites	74.2
Groundwater	77.9
Haz Waste Facilities/Generators	93.2
Impaired Water Bodies	100.0
Solid Waste	86.5
Sensitive Population	—
Asthma	87.6
Cardio-vascular	83.2
Low Birth Weights	26.9

Socioeconomic Factor Indicators	—
Education	82.7
Housing	51.4
Linguistic	88.8
Poverty	94.9
Unemployment	99.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	16.66880534
Employed	7.173104068
Median HI	5.299627871
Education	—
Bachelor's or higher	5.017323239
High school enrollment	16.8741178
Preschool enrollment	68.89516233
Transportation	—
Auto Access	18.40112922
Active commuting	51.10997049
Social	—
2-parent households	13.28114975
Voting	16.79712563
Neighborhood	—
Alcohol availability	70.25535737
Park access	33.85089183
Retail density	4.311561658

Supermarket access	49.58295907
Tree canopy	0.782753753
Housing	—
Homeownership	38.3036058
Housing habitability	30.96368536
Low-inc homeowner severe housing cost burden	26.76761196
Low-inc renter severe housing cost burden	52.89362248
Uncrowded housing	38.58591043
Health Outcomes	—
Insured adults	21.00603105
Arthritis	0.0
Asthma ER Admissions	30.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	41.7
Cognitively Disabled	50.3
Physically Disabled	19.5
Heart Attack ER Admissions	46.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	54.3
Physical Health Not Good	0.0
Stroke	0.0

Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	14.1
Elderly	42.0
English Speaking	18.7
Foreign-born	65.3
Outdoor Workers	5.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	85.8
Traffic Density	4.9
Traffic Access	23.0
Other Indices	—
Hardship	92.9
Other Decision Support	—
2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	82.0
Healthy Places Index Score for Project Location (b)	11.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Land use data are based on applicant-provided buildout assumptions.
Operations: Landscape Equipment	Assumed 270 summer days for desert region.
Operations: Vehicle Data	Trip rates are based on ITE Land Use Code 170
Operations: Road Dust	85% of roads assumed to be paved based on ICAPCD guidance and project narrative.
Operations: Water and Waste Water	Water data are based on applicant-provided calculations for the land use.

Lithium Valley Operations - Phase 1 - Geothermal Energy Detailed Report

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4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

4.3. Area Emissions by Source

4.3.1. Unmitigated

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

5.10.3. Landscape Equipment

5.11. Operational Energy Consumption

5.11.1. Unmitigated

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

5.13. Operational Waste Generation

5.13.1. Unmitigated

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

5.16.2. Process Boilers

5.17. User Defined

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

5.18.2. Sequestration

5.18.2.1. Unmitigated

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

6.2. Initial Climate Risk Scores

6.3. Adjusted Climate Risk Scores

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

7.2. Healthy Places Index Scores

7.3. Overall Health & Equity Scores

7.4. Health & Equity Measures

7.5. Evaluation Scorecard

7.6. Health & Equity Custom Measures

8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Lithium Valley Operations - Phase 1 - Geothermal Energy
Operational Year	2035
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	4.80
Location	33.191685370393785, -115.60759423347932
County	Imperial
City	Unincorporated
Air District	Imperial County APCD
Air Basin	Salton Sea
TAZ	5600
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
General Heavy Industry	7,469	1000sqft	4,165	7,469,299	1,493,860	—	—	—
Parking Lot	14,939	1000sqft	343	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	356	342	319	1,042	1.92	10.6	24,319	24,329	10.4	2,442	2,452	13,338	420,291	433,629	1,389	30.0	2,147	479,442
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	293	283	322	513	1.70	10.0	24,319	24,329	9.96	2,442	2,452	13,338	399,204	412,542	1,389	30.3	1,950	458,236
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	268	261	72.3	556	1.08	2.28	16,585	16,588	2.14	1,666	1,668	13,338	334,123	347,461	1,387	28.1	2,005	392,521
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	48.8	47.6	13.2	101	0.20	0.42	3,027	3,027	0.39	304	304	2,208	55,318	57,526	230	4.65	332	64,986

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	39.0	35.2	43.6	558	1.60	0.87	24,319	24,319	0.82	2,442	2,443	—	162,987	162,987	3.10	5.76	203	164,983

Area	249	245	2.73	325	0.02	0.58	—	0.58	0.44	—	0.44	—	1,336	1,336	0.06	0.01	—	1,341
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	210,088	210,088	28.1	3.41	—	211,807
Water	—	—	—	—	—	—	—	—	—	—	—	8,347	14,104	22,451	858	20.6	—	50,022
Waste	—	—	—	—	—	—	—	—	—	—	—	4,992	0.00	4,992	499	0.00	—	17,464
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,944	1,944
Stationary	68.2	62.1	272	158	0.30	9.14	0.00	9.14	9.14	0.00	9.14	0.00	31,776	31,776	1.28	0.25	0.00	31,882
Total	356	342	319	1,042	1.92	10.6	24,319	24,329	10.4	2,442	2,452	13,338	420,291	433,629	1,389	30.0	2,147	479,442
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	33.6	29.9	49.4	355	1.41	0.87	24,319	24,319	0.82	2,442	2,443	—	143,236	143,236	3.12	6.03	5.25	145,117
Area	191	191	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	210,088	210,088	28.1	3.41	—	211,807
Water	—	—	—	—	—	—	—	—	—	—	—	8,347	14,104	22,451	858	20.6	—	50,022
Waste	—	—	—	—	—	—	—	—	—	—	—	4,992	0.00	4,992	499	0.00	—	17,464
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,944	1,944
Stationary	68.2	62.1	272	158	0.30	9.14	0.00	9.14	9.14	0.00	9.14	0.00	31,776	31,776	1.28	0.25	0.00	31,882
Total	293	283	322	513	1.70	10.0	24,319	24,329	9.96	2,442	2,452	13,338	399,204	412,542	1,389	30.3	1,950	458,236
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	24.3	21.7	33.0	294	1.03	0.60	16,585	16,586	0.57	1,666	1,666	—	104,590	104,590	2.12	4.10	60.5	105,925
Area	234	231	2.02	240	0.01	0.43	—	0.43	0.32	—	0.32	—	988	988	0.04	0.01	—	992
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	210,088	210,088	28.1	3.41	—	211,807
Water	—	—	—	—	—	—	—	—	—	—	—	8,347	14,104	22,451	858	20.6	—	50,022
Waste	—	—	—	—	—	—	—	—	—	—	—	4,992	0.00	4,992	499	0.00	—	17,464
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,944	1,944
Stationary	9.35	8.51	37.3	21.7	0.04	1.25	0.00	1.25	1.25	0.00	1.25	0.00	4,353	4,353	0.17	0.03	0.00	4,367
Total	268	261	72.3	556	1.08	2.28	16,585	16,588	2.14	1,666	1,668	13,338	334,123	347,461	1,387	28.1	2,005	392,521

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	4.43	3.97	6.02	53.7	0.19	0.11	3,027	3,027	0.10	304	304	—	17,316	17,316	0.35	0.68	10.0	17,537
Area	42.7	42.1	0.37	43.9	< 0.005	0.08	—	0.08	0.06	—	0.06	—	164	164	0.01	< 0.005	—	164
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	34,782	34,782	4.66	0.56	—	35,067
Water	—	—	—	—	—	—	—	—	—	—	—	1,382	2,335	3,717	142	3.40	—	8,282
Waste	—	—	—	—	—	—	—	—	—	—	—	826	0.00	826	82.6	0.00	—	2,891
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	322	322
Stationary	1.71	1.55	6.81	3.96	0.01	0.23	0.00	0.23	0.23	0.00	0.23	0.00	721	721	0.03	0.01	0.00	723
Total	48.8	47.6	13.2	101	0.20	0.42	3,027	3,027	0.39	304	304	2,208	55,318	57,526	230	4.65	332	64,986

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	39.0	35.2	43.6	558	1.60	0.87	24,319	24,319	0.82	2,442	2,443	—	162,987	162,987	3.10	5.76	203	164,983
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	39.0	35.2	43.6	558	1.60	0.87	24,319	24,319	0.82	2,442	2,443	—	162,987	162,987	3.10	5.76	203	164,983
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	33.6	29.9	49.4	355	1.41	0.87	24,319	24,319	0.82	2,442	2,443	—	143,236	143,236	3.12	6.03	5.25	145,117
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	33.6	29.9	49.4	355	1.41	0.87	24,319	24,319	0.82	2,442	2,443	—	143,236	143,236	3.12	6.03	5.25	145,117
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	4.43	3.97	6.02	53.7	0.19	0.11	3,027	3,027	0.10	304	304	—	17,316	17,316	0.35	0.68	10.0	17,537
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	4.43	3.97	6.02	53.7	0.19	0.11	3,027	3,027	0.10	304	304	—	17,316	17,316	0.35	0.68	10.0	17,537

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	201,250	201,250	26.9	3.27	—	202,897
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	8,838	8,838	1.18	0.14	—	8,910
Total	—	—	—	—	—	—	—	—	—	—	—	—	210,088	210,088	28.1	3.41	—	211,807
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	201,250	201,250	26.9	3.27	—	202,897
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	8,838	8,838	1.18	0.14	—	8,910
Total	—	—	—	—	—	—	—	—	—	—	—	—	210,088	210,088	28.1	3.41	—	211,807
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	33,319	33,319	4.46	0.54	—	33,592
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	1,463	1,463	0.20	0.02	—	1,475
Total	—	—	—	—	—	—	—	—	—	—	—	—	34,782	34,782	4.66	0.56	—	35,067

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	161	161	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	30.2	30.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	57.9	53.4	2.73	325	0.02	0.58	—	0.58	0.44	—	0.44	—	1,336	1,336	0.06	0.01	—	1,341
Total	249	245	2.73	325	0.02	0.58	—	0.58	0.44	—	0.44	—	1,336	1,336	0.06	0.01	—	1,341
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Consum Products	161	161	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	30.2	30.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	191	191	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	29.4	29.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	5.51	5.51	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	7.81	7.21	0.37	43.9	< 0.005	0.08	—	0.08	0.06	—	0.06	—	164	164	0.01	< 0.005	—	164
Total	42.7	42.1	0.37	43.9	< 0.005	0.08	—	0.08	0.06	—	0.06	—	164	164	0.01	< 0.005	—	164

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	8,347	14,104	22,451	858	20.6	—	50,022

Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	8,347	14,104	22,451	858	20.6	—	50,022
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	8,347	14,104	22,451	858	20.6	—	50,022
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	8,347	14,104	22,451	858	20.6	—	50,022
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	1,382	2,335	3,717	142	3.40	—	8,282
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1,382	2,335	3,717	142	3.40	—	8,282

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	4,992	0.00	4,992	499	0.00	—	17,464
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Total	—	—	—	—	—	—	—	—	—	—	—	4,992	0.00	4,992	499	0.00	—	17,464
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	4,992	0.00	4,992	499	0.00	—	17,464
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	4,992	0.00	4,992	499	0.00	—	17,464
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	826	0.00	826	82.6	0.00	—	2,891
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	826	0.00	826	82.6	0.00	—	2,891

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,944	1,944
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,944	1,944
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,944	1,944
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,944	1,944
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	322	322
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	322	322

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipm Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	64.6	58.8	263	150	0.28	8.65	0.00	8.65	8.65	0.00	8.65	0.00	30,097	30,097	1.21	0.24	0.00	30,197
Fire Pump	3.61	3.28	9.17	8.37	0.02	0.48	0.00	0.48	0.48	0.00	0.48	0.00	1,679	1,679	0.07	0.01	0.00	1,685
Total	68.2	62.1	272	158	0.30	9.14	0.00	9.14	9.14	0.00	9.14	0.00	31,776	31,776	1.28	0.25	0.00	31,882
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	64.6	58.8	263	150	0.28	8.65	0.00	8.65	8.65	0.00	8.65	0.00	30,097	30,097	1.21	0.24	0.00	30,197
Fire Pump	3.61	3.28	9.17	8.37	0.02	0.48	0.00	0.48	0.48	0.00	0.48	0.00	1,679	1,679	0.07	0.01	0.00	1,685
Total	68.2	62.1	272	158	0.30	9.14	0.00	9.14	9.14	0.00	9.14	0.00	31,776	31,776	1.28	0.25	0.00	31,882
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	1.62	1.47	6.58	3.75	0.01	0.22	0.00	0.22	0.22	0.00	0.22	0.00	683	683	0.03	0.01	0.00	685
Fire Pump	0.09	0.08	0.23	0.21	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	38.1	38.1	< 0.005	< 0.005	0.00	38.2
Total	1.71	1.55	6.81	3.96	0.01	0.23	0.00	0.23	0.23	0.00	0.23	0.00	721	721	0.03	0.01	0.00	723

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipm Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
General Heavy Industry	5,602	9,187	7,245	2,317,350	132,100	216,643	170,849	54,645,171
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	11,203,949	3,734,650	896,316

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	270

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
General Heavy Industry	297,985,364	247	0.0330	0.0040	0.00
Parking Lot	13,086,213	247	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
General Heavy Industry	4,355,683,704	77,111,659
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
General Heavy Industry	9,262	—
Parking Lot	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
General Heavy Industry	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
Emergency Generator	Diesel	6.00	1.00	50.0	4,300	0.73
Emergency Generator	Diesel	3.00	1.00	50.0	3,350	0.73
Fire Pump	Diesel	4.00	1.00	50.0	500	0.73

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit

Temperature and Extreme Heat	32.8	annual days of extreme heat
Extreme Precipitation	0.00	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.19	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	11.6
AQ-PM	19.1
AQ-DPM	9.09
Drinking Water	30.6
Lead Risk Housing	50.8
Pesticides	90.5
Toxic Releases	7.58

Traffic	3.06
Effect Indicators	—
CleanUp Sites	74.2
Groundwater	77.9
Haz Waste Facilities/Generators	93.2
Impaired Water Bodies	100.0
Solid Waste	86.5
Sensitive Population	—
Asthma	87.6
Cardio-vascular	83.2
Low Birth Weights	26.9
Socioeconomic Factor Indicators	—
Education	82.7
Housing	51.4
Linguistic	88.8
Poverty	94.9
Unemployment	99.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	16.66880534
Employed	7.173104068
Median HI	5.299627871
Education	—
Bachelor's or higher	5.017323239
High school enrollment	16.8741178

Preschool enrollment	68.89516233
Transportation	—
Auto Access	18.40112922
Active commuting	51.10997049
Social	—
2-parent households	13.28114975
Voting	16.79712563
Neighborhood	—
Alcohol availability	70.25535737
Park access	33.85089183
Retail density	4.311561658
Supermarket access	49.58295907
Tree canopy	0.782753753
Housing	—
Homeownership	38.3036058
Housing habitability	30.96368536
Low-inc homeowner severe housing cost burden	26.76761196
Low-inc renter severe housing cost burden	52.89362248
Uncrowded housing	38.58591043
Health Outcomes	—
Insured adults	21.00603105
Arthritis	0.0
Asthma ER Admissions	30.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0

Diagnosed Diabetes	0.0
Life Expectancy at Birth	41.7
Cognitively Disabled	50.3
Physically Disabled	19.5
Heart Attack ER Admissions	46.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	54.3
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	14.1
Elderly	42.0
English Speaking	18.7
Foreign-born	65.3
Outdoor Workers	5.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	85.8
Traffic Density	4.9
Traffic Access	23.0
Other Indices	—

Hardship	92.9
Other Decision Support	—
2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	82.0
Healthy Places Index Score for Project Location (b)	11.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Land use data are based on applicant-provided buildout assumptions.
Operations: Landscape Equipment	Assumed 270 summer days for desert region.
Operations: Energy Use	Natural gas not anticipated as part of project operations.

Operations: Emergency Generators and Fire Pumps	Assumed 3 4,300 hp back-up generators operating 1 hour/day and 50 hours/year each for maintenance and testing. Assumed 6 3,350 hp back up generators operating 1 hour/day and 50 hours/year each for maintenance and testing. Also assumed 4 fire pumps operating 1 hour/day and 50 hours/year each for maintenance and testing.
Operations: Road Dust	85% of roads assumed to be paved based on ICAPCD guidance and project narrative.
Operations: Vehicle Data	Custom trip rates provided by applicant.
Operations: Water and Waste Water	Water data are based on applicant-provided calculations for the land use.

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Lithium Valley Operation - Phase 2 - Parks
Operational Year	2045
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	4.80
Location	33.18829759139308, -115.6026869228474
County	Imperial
City	Unincorporated
Air District	Imperial County APCD
Air Basin	Salton Sea
TAZ	5600
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
City Park	103	Acre	103	0.00	4,031,433	4,031,433	—	—
Parking Lot	448	1000sqft	10.3	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.19	3.13	0.85	10.3	0.03	0.02	515	515	0.02	51.7	51.7	4.77	3,310	3,315	0.53	0.13	0.92	3,367
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.11	3.04	0.95	6.62	0.03	0.02	515	515	0.02	51.7	51.7	4.77	2,918	2,923	0.53	0.13	0.02	2,975
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.82	2.79	0.48	4.15	0.02	0.01	267	267	0.01	26.8	26.8	4.77	1,617	1,622	0.51	0.07	0.21	1,655
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.52	0.51	0.09	0.76	< 0.005	< 0.005	48.7	48.7	< 0.005	4.89	4.89	0.79	268	268	0.08	0.01	0.03	274

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.71	0.65	0.85	10.3	0.03	0.02	515	515	0.02	51.7	51.7	—	3,310	3,310	0.06	0.13	0.92	3,350

Area	2.48	2.48	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	4.77	0.00	4.77	0.48	0.00	—	16.7
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	3.19	3.13	0.85	10.3	0.03	0.02	515	515	0.02	51.7	51.7	4.77	3,310	3,315	0.53	0.13	0.92	3,367
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.63	0.57	0.95	6.62	0.03	0.02	515	515	0.02	51.7	51.7	—	2,918	2,918	0.06	0.13	0.02	2,958
Area	2.48	2.48	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	4.77	0.00	4.77	0.48	0.00	—	16.7
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	3.11	3.04	0.95	6.62	0.03	0.02	515	515	0.02	51.7	51.7	4.77	2,918	2,923	0.53	0.13	0.02	2,975
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.34	0.31	0.48	4.15	0.02	0.01	267	267	0.01	26.8	26.8	—	1,617	1,617	0.03	0.07	0.21	1,638
Area	2.48	2.48	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	4.77	0.00	4.77	0.48	0.00	—	16.7
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	2.82	2.79	0.48	4.15	0.02	0.01	267	267	0.01	26.8	26.8	4.77	1,617	1,622	0.51	0.07	0.21	1,655
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.06	0.06	0.09	0.76	< 0.005	< 0.005	48.7	48.7	< 0.005	4.89	4.89	—	268	268	< 0.005	0.01	0.03	271
Area	0.45	0.45	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.79	0.00	0.79	0.08	0.00	—	2.76
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	0.52	0.51	0.09	0.76	< 0.005	< 0.005	48.7	48.7	< 0.005	4.89	4.89	0.79	268	268	0.08	0.01	0.03	274

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	0.71	0.65	0.85	10.3	0.03	0.02	515	515	0.02	51.7	51.7	—	3,310	3,310	0.06	0.13	0.92	3,350
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.71	0.65	0.85	10.3	0.03	0.02	515	515	0.02	51.7	51.7	—	3,310	3,310	0.06	0.13	0.92	3,350
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	0.63	0.57	0.95	6.62	0.03	0.02	515	515	0.02	51.7	51.7	—	2,918	2,918	0.06	0.13	0.02	2,958
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.63	0.57	0.95	6.62	0.03	0.02	515	515	0.02	51.7	51.7	—	2,918	2,918	0.06	0.13	0.02	2,958
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	0.06	0.06	0.09	0.76	< 0.005	< 0.005	48.7	48.7	< 0.005	4.89	4.89	—	268	268	< 0.005	0.01	0.03	271

Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.06	0.06	0.09	0.76	< 0.005	< 0.005	48.7	48.7	< 0.005	4.89	4.89	—	268	268	< 0.005	0.01	0.03	271

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	2.41	2.41	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.07	0.07	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	2.48	2.48	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	2.41	2.41	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.07	0.07	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	2.48	2.48	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.44	0.44	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.01	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Landscape	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.45	0.45	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	4.77	0.00	4.77	0.48	0.00	—	16.7
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	4.77	0.00	4.77	0.48	0.00	—	16.7
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	4.77	0.00	4.77	0.48	0.00	—	16.7
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	4.77	0.00	4.77	0.48	0.00	—	16.7
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	0.79	0.00	0.79	0.08	0.00	—	2.76
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.79	0.00	0.79	0.08	0.00	—	2.76

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Remove	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
City Park	80.2	202	225	43,163	1,634	4,105	4,587	879,174
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	6,000	2,000	26,876

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	270

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
City Park	0.00	0.00	0.0000	0.0000	0.00
Parking Lot	392,395	0.00	0.0000	0.0000	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
City Park	0.00	2,577,452
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)

City Park	8.84	—
Parking Lot	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
City Park	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
City Park	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	32.8	annual days of extreme heat
Extreme Precipitation	0.00	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.19	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A

Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	11.6
AQ-PM	19.1
AQ-DPM	9.09
Drinking Water	30.6
Lead Risk Housing	50.8
Pesticides	90.5
Toxic Releases	7.58
Traffic	3.06
Effect Indicators	—
CleanUp Sites	74.2
Groundwater	77.9

Haz Waste Facilities/Generators	93.2
Impaired Water Bodies	100.0
Solid Waste	86.5
Sensitive Population	—
Asthma	87.6
Cardio-vascular	83.2
Low Birth Weights	26.9
Socioeconomic Factor Indicators	—
Education	82.7
Housing	51.4
Linguistic	88.8
Poverty	94.9
Unemployment	99.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	16.66880534
Employed	7.173104068
Median HI	5.299627871
Education	—
Bachelor's or higher	5.017323239
High school enrollment	16.8741178
Preschool enrollment	68.89516233
Transportation	—
Auto Access	18.40112922
Active commuting	51.10997049

Social	—
2-parent households	13.28114975
Voting	16.79712563
Neighborhood	—
Alcohol availability	70.25535737
Park access	33.85089183
Retail density	4.311561658
Supermarket access	49.58295907
Tree canopy	0.782753753
Housing	—
Homeownership	38.3036058
Housing habitability	30.96368536
Low-inc homeowner severe housing cost burden	26.76761196
Low-inc renter severe housing cost burden	52.89362248
Uncrowded housing	38.58591043
Health Outcomes	—
Insured adults	21.00603105
Arthritis	0.0
Asthma ER Admissions	30.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	41.7
Cognitively Disabled	50.3
Physically Disabled	19.5

Heart Attack ER Admissions	46.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	54.3
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	14.1
Elderly	42.0
English Speaking	18.7
Foreign-born	65.3
Outdoor Workers	5.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	85.8
Traffic Density	4.9
Traffic Access	23.0
Other Indices	—
Hardship	92.9
Other Decision Support	—
2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	82.0
Healthy Places Index Score for Project Location (b)	11.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Land use data are based on applicant-provided buildout assumptions.
Operations: Vehicle Data	Based on SANDAG trip rate for regional, developed park. Defaults for trip length were not changed.
Operations: Road Dust	All roads used by future developments projects within the Specific Plan Area would be required to be paved. Per ICAPCD guidance a value of 85% paved is assumed in the modeling to account for the high levels of entrained dust generated from vehicle travel on paved roadways in the region.
Operations: Landscape Equipment	Assumed 270 summer days for desert region.
Operations: Water and Waste Water	Water data are based on applicant-provided calculations for the land use.
Characteristics: Utility Information	GHG intensity factors adjusted per RPS requirements.

Lithium Valley Operation - Phase 2 - Agrivoltaics Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Lithium Valley Operation - Phase 2 - Agrivoltaics
Operational Year	2045
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	4.80
Location	33.18829759139308, -115.6026869228474
County	Imperial
City	Unincorporated
Air District	Imperial County APCD
Air Basin	Salton Sea
TAZ	5600
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
General Heavy Industry	10.0	1000sqft	354	10,000	2,000	—	—	—
Parking Lot	20.0	1000sqft	0.46	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.34	0.33	0.01	0.54	< 0.005	< 0.005	5.39	5.39	< 0.005	0.54	0.54	6.68	36.4	43.0	0.67	< 0.005	0.24	60.4
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.26	0.26	0.01	0.07	< 0.005	< 0.005	5.39	5.39	< 0.005	0.54	0.54	6.68	30.5	37.1	0.67	< 0.005	0.23	54.5
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.32	0.31	0.01	0.38	< 0.005	< 0.005	3.80	3.80	< 0.005	0.38	0.38	6.68	24.3	31.0	0.67	< 0.005	0.24	48.2
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.06	0.06	< 0.005	0.07	< 0.005	< 0.005	0.69	0.69	< 0.005	0.07	0.07	1.11	4.02	5.13	0.11	< 0.005	0.04	7.98

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.01	0.01	0.01	0.11	< 0.005	< 0.005	5.39	5.39	< 0.005	0.54	0.54	—	34.6	34.6	< 0.005	< 0.005	0.01	35.0

Area	0.33	0.33	< 0.005	0.43	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.79	1.79	< 0.005	< 0.005	—	1.79
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	6.68	0.00	6.68	0.67	0.00	—	23.4
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.23	0.23
Total	0.34	0.33	0.01	0.54	< 0.005	< 0.005	5.39	5.39	< 0.005	0.54	0.54	6.68	36.4	43.0	0.67	< 0.005	0.24	60.4
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.01	0.01	0.01	0.07	< 0.005	< 0.005	5.39	5.39	< 0.005	0.54	0.54	—	30.5	30.5	< 0.005	< 0.005	< 0.005	30.9
Area	0.26	0.26	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	6.68	0.00	6.68	0.67	0.00	—	23.4
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.23	0.23
Total	0.26	0.26	0.01	0.07	< 0.005	< 0.005	5.39	5.39	< 0.005	0.54	0.54	6.68	30.5	37.1	0.67	< 0.005	0.23	54.5
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	< 0.005	< 0.005	0.01	0.06	< 0.005	< 0.005	3.80	3.80	< 0.005	0.38	0.38	—	23.0	23.0	< 0.005	< 0.005	< 0.005	23.3
Area	0.31	0.31	< 0.005	0.32	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.32	1.32	< 0.005	< 0.005	—	1.33
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	6.68	0.00	6.68	0.67	0.00	—	23.4
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.23	0.23
Total	0.32	0.31	0.01	0.38	< 0.005	< 0.005	3.80	3.80	< 0.005	0.38	0.38	6.68	24.3	31.0	0.67	< 0.005	0.24	48.2
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	0.69	0.69	< 0.005	0.07	0.07	—	3.80	3.80	< 0.005	< 0.005	< 0.005	3.85
Area	0.06	0.06	< 0.005	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.22	0.22	< 0.005	< 0.005	—	0.22
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	1.11	0.00	1.11	0.11	0.00	—	3.87
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.04	0.04
Total	0.06	0.06	< 0.005	0.07	< 0.005	< 0.005	0.69	0.69	< 0.005	0.07	0.07	1.11	4.02	5.13	0.11	< 0.005	0.04	7.98

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Mobile source emissions results are presented in Sections 2.6. No further detailed breakdown of emissions is available.

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.22	0.22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.04	0.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.08	0.07	< 0.005	0.43	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.79	1.79	< 0.005	< 0.005	—	1.79
Total	0.33	0.33	< 0.005	0.43	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.79	1.79	< 0.005	< 0.005	—	1.79
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.22	0.22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architect Coatings	0.04	0.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.26	0.26	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.04	0.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.01	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.01	0.01	< 0.005	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.22	0.22	< 0.005	< 0.005	—	0.22
Total	0.06	0.06	< 0.005	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.22	0.22	< 0.005	< 0.005	—	0.22

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	6.68	0.00	6.68	0.67	0.00	—	23.4
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	6.68	0.00	6.68	0.67	0.00	—	23.4

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	6.68	0.00	6.68	0.67	0.00	—	23.4
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	6.68	0.00	6.68	0.67	0.00	—	23.4
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	1.11	0.00	1.11	0.11	0.00	—	3.87
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1.11	0.00	1.11	0.11	0.00	—	3.87

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.23	0.23
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.23	0.23
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.23	0.23
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.23	0.23
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.04	0.04
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.04	0.04

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipm Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Remove	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Total all Land Uses	2.00	0.00	0.00	521	48.0	0.00	0.00	12,514

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	15,000	5,000	1,200

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	270

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
General Heavy Industry	2,482,000	0.00	0.0000	0.0000	0.00
Parking Lot	17,520	0.00	0.0000	0.0000	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
General Heavy Industry	0.00	3,801,461
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
General Heavy Industry	12.4	—
Parking Lot	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
General Heavy Industry	User Defined	User Defined	23,900	0.01	0.50	0.50	30.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
Emergency Generator	Diesel	1.00	1.00	50.0	500	0.73

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	32.8	annual days of extreme heat
Extreme Precipitation	0.00	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.19	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A

Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	11.6
AQ-PM	19.1
AQ-DPM	9.09
Drinking Water	30.6
Lead Risk Housing	50.8
Pesticides	90.5
Toxic Releases	7.58
Traffic	3.06
Effect Indicators	—
CleanUp Sites	74.2
Groundwater	77.9
Haz Waste Facilities/Generators	93.2
Impaired Water Bodies	100.0
Solid Waste	86.5
Sensitive Population	—
Asthma	87.6
Cardio-vascular	83.2
Low Birth Weights	26.9
Socioeconomic Factor Indicators	—
Education	82.7
Housing	51.4
Linguistic	88.8

Poverty	94.9
Unemployment	99.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	16.66880534
Employed	7.173104068
Median HI	5.299627871
Education	—
Bachelor's or higher	5.017323239
High school enrollment	16.8741178
Preschool enrollment	68.89516233
Transportation	—
Auto Access	18.40112922
Active commuting	51.10997049
Social	—
2-parent households	13.28114975
Voting	16.79712563
Neighborhood	—
Alcohol availability	70.25535737
Park access	33.85089183
Retail density	4.311561658
Supermarket access	49.58295907
Tree canopy	0.782753753
Housing	—
Homeownership	38.3036058

Housing habitability	30.96368536
Low-inc homeowner severe housing cost burden	26.76761196
Low-inc renter severe housing cost burden	52.89362248
Uncrowded housing	38.58591043
Health Outcomes	—
Insured adults	21.00603105
Arthritis	0.0
Asthma ER Admissions	30.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	41.7
Cognitively Disabled	50.3
Physically Disabled	19.5
Heart Attack ER Admissions	46.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	54.3
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0

Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	14.1
Elderly	42.0
English Speaking	18.7
Foreign-born	65.3
Outdoor Workers	5.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	85.8
Traffic Density	4.9
Traffic Access	23.0
Other Indices	—
Hardship	92.9
Other Decision Support	—
2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	82.0
Healthy Places Index Score for Project Location (b)	11.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Land use data are based on applicant-provided buildout assumptions. 10,000 square feet of building anticipated for operation. No landscaping anticipated for agrivoltaics
Operations: Water and Waste Water	No indoor water usage anticipated.
Operations: Refrigerants	Assumed 500lbs. of SF6 for project operations.
Operations: Landscape Equipment	Assumed 270 summer days for desert region.
Operations: Emergency Generators and Fire Pumps	Assumed 1 back-up generator operating 1 hour/day and 50 hours/year for maintne
Operations: Energy Use	Electricity consumption assumed to include system auxiliary energy consumption (2%), based on an assumed capacity of 85 MW system, operating 4 hours/day and 365 days/year.
Operations: Road Dust	All roads used by future developments projects within the Specific Plan Area would be required to be paved. Per ICAPCD guidance a value of 85% paved is assumed in the modeling to account for the high levels of entrained dust generated from vehicle travel on paved roadways in the region.
Characteristics: Utility Information	GHG intensity factors adjusted per RPS requirements.

Lithium Valley Operation - Phase 2 - Anaerobic Digester Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

1.2. Land Use Types

1.3. User-Selected Emission Reduction Measures by Emissions Sector

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

2.5. Operations Emissions by Sector, Unmitigated

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

4.3. Area Emissions by Source

4.3.1. Unmitigated

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

5.10.3. Landscape Equipment

5.11. Operational Energy Consumption

5.11.1. Unmitigated

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

5.13. Operational Waste Generation

5.13.1. Unmitigated

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

5.16.2. Process Boilers

5.17. User Defined

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

5.18.2. Sequestration

5.18.2.1. Unmitigated

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

6.2. Initial Climate Risk Scores

6.3. Adjusted Climate Risk Scores

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

7.2. Healthy Places Index Scores

7.3. Overall Health & Equity Scores

7.4. Health & Equity Measures

7.5. Evaluation Scorecard

7.6. Health & Equity Custom Measures

8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Lithium Valley Operation - Phase 2 - Anaerobic Digester
Operational Year	2045
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	4.80
Location	33.18829759139308, -115.6026869228474
County	Imperial
City	Unincorporated
Air District	Imperial County APCD
Air Basin	Salton Sea
TAZ	5600
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
General Heavy Industry	50.0	1000sqft	400	50,000	10,000	—	—	—
Parking Lot	100	1000sqft	2.30	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.90	4.55	4.24	48.5	0.15	0.11	2,296	2,296	0.11	231	231	834	15,287	16,121	85.8	2.52	17.1	19,033
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.14	3.83	4.69	29.9	0.13	0.11	2,296	2,296	0.10	231	231	834	13,529	14,363	85.8	2.54	13.1	17,278
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.64	3.39	3.30	26.4	0.10	0.09	1,571	1,571	0.08	158	158	834	10,044	10,878	85.7	2.35	14.2	13,736
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.66	0.62	0.60	4.82	0.02	0.02	287	287	0.02	28.8	28.8	138	1,663	1,801	14.2	0.39	2.36	2,274

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	3.18	2.89	3.78	45.9	0.14	0.08	2,296	2,296	0.07	231	231	—	14,757	14,757	0.25	0.56	4.10	14,936

Area	1.67	1.64	0.02	2.17	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.94	8.94	< 0.005	< 0.005	—	8.97
Energy	0.05	0.02	0.44	0.37	< 0.005	0.03	—	0.03	0.03	—	0.03	—	521	521	0.05	< 0.005	—	522
Water	—	—	—	—	—	—	—	—	—	—	—	801	0.00	801	82.1	1.95	—	3,436
Waste	—	—	—	—	—	—	—	—	—	—	—	33.4	0.00	33.4	3.34	0.00	—	117
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13.0	13.0
Total	4.90	4.55	4.24	48.5	0.15	0.11	2,296	2,296	0.11	231	231	834	15,287	16,121	85.8	2.52	17.1	19,033
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	2.81	2.52	4.25	29.5	0.13	0.08	2,296	2,296	0.07	231	231	—	13,008	13,008	0.25	0.59	0.11	13,190
Area	1.28	1.28	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.05	0.02	0.44	0.37	< 0.005	0.03	—	0.03	0.03	—	0.03	—	521	521	0.05	< 0.005	—	522
Water	—	—	—	—	—	—	—	—	—	—	—	801	0.00	801	82.1	1.95	—	3,436
Waste	—	—	—	—	—	—	—	—	—	—	—	33.4	0.00	33.4	3.34	0.00	—	117
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13.0	13.0
Total	4.14	3.83	4.69	29.9	0.13	0.11	2,296	2,296	0.10	231	231	834	13,529	14,363	85.8	2.54	13.1	17,278
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	2.02	1.82	2.85	24.4	0.09	0.05	1,571	1,571	0.05	158	158	—	9,517	9,517	0.17	0.40	1.23	9,642
Area	1.57	1.54	0.01	1.61	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.61	6.61	< 0.005	< 0.005	—	6.64
Energy	0.05	0.02	0.44	0.37	< 0.005	0.03	—	0.03	0.03	—	0.03	—	521	521	0.05	< 0.005	—	522
Water	—	—	—	—	—	—	—	—	—	—	—	801	0.00	801	82.1	1.95	—	3,436
Waste	—	—	—	—	—	—	—	—	—	—	—	33.4	0.00	33.4	3.34	0.00	—	117
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13.0	13.0
Total	3.64	3.39	3.30	26.4	0.10	0.09	1,571	1,571	0.08	158	158	834	10,044	10,878	85.7	2.35	14.2	13,736
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.37	0.33	0.52	4.46	0.02	0.01	287	287	0.01	28.8	28.8	—	1,576	1,576	0.03	0.07	0.20	1,596
Area	0.29	0.28	< 0.005	0.29	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.10	1.10	< 0.005	< 0.005	—	1.10
Energy	0.01	< 0.005	0.08	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	86.2	86.2	0.01	< 0.005	—	86.4

Water	—	—	—	—	—	—	—	—	—	—	—	133	0.00	133	13.6	0.32	—	569
Waste	—	—	—	—	—	—	—	—	—	—	—	5.53	0.00	5.53	0.55	0.00	—	19.4
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.15	2.15
Total	0.66	0.62	0.60	4.82	0.02	0.02	287	287	0.02	28.8	28.8	138	1,663	1,801	14.2	0.39	2.36	2,274

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	3.18	2.89	3.78	45.9	0.14	0.08	2,296	2,296	0.07	231	231	—	14,757	14,757	0.25	0.56	4.10	14,936
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	3.18	2.89	3.78	45.9	0.14	0.08	2,296	2,296	0.07	231	231	—	14,757	14,757	0.25	0.56	4.10	14,936
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	2.81	2.52	4.25	29.5	0.13	0.08	2,296	2,296	0.07	231	231	—	13,008	13,008	0.25	0.59	0.11	13,190
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	2.81	2.52	4.25	29.5	0.13	0.08	2,296	2,296	0.07	231	231	—	13,008	13,008	0.25	0.59	0.11	13,190
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	0.37	0.33	0.52	4.46	0.02	0.01	287	287	0.01	28.8	28.8	—	1,576	1,576	0.03	0.07	0.20	1,596
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.37	0.33	0.52	4.46	0.02	0.01	287	287	0.01	28.8	28.8	—	1,576	1,576	0.03	0.07	0.20	1,596

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.05	0.02	0.44	0.37	< 0.005	0.03	—	0.03	0.03	—	0.03	—	521	521	0.05	< 0.005	—	522
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.05	0.02	0.44	0.37	< 0.005	0.03	—	0.03	0.03	—	0.03	—	521	521	0.05	< 0.005	—	522
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.05	0.02	0.44	0.37	< 0.005	0.03	—	0.03	0.03	—	0.03	—	521	521	0.05	< 0.005	—	522
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.05	0.02	0.44	0.37	< 0.005	0.03	—	0.03	0.03	—	0.03	—	521	521	0.05	< 0.005	—	522
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.01	< 0.005	0.08	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	86.2	86.2	0.01	< 0.005	—	86.4

Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.01	< 0.005	0.08	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	86.2	86.2	0.01	< 0.005	—	86.4

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	1.08	1.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.20	0.20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.39	0.36	0.02	2.17	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.94	8.94	< 0.005	< 0.005	—	8.97
Total	1.67	1.64	0.02	2.17	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.94	8.94	< 0.005	< 0.005	—	8.97
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	1.08	1.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.20	0.20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	1.28	1.28	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.20	0.20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.04	0.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.05	0.05	< 0.005	0.29	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.10	1.10	< 0.005	< 0.005	—	1.10
Total	0.29	0.28	< 0.005	0.29	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.10	1.10	< 0.005	< 0.005	—	1.10

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	801	0.00	801	82.1	1.95	—	3,436
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	801	0.00	801	82.1	1.95	—	3,436
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	801	0.00	801	82.1	1.95	—	3,436
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	801	0.00	801	82.1	1.95	—	3,436
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	133	0.00	133	13.6	0.32	—	569
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	133	0.00	133	13.6	0.32	—	569

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	33.4	0.00	33.4	3.34	0.00	—	117
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	33.4	0.00	33.4	3.34	0.00	—	117
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	33.4	0.00	33.4	3.34	0.00	—	117
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	33.4	0.00	33.4	3.34	0.00	—	117
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	5.53	0.00	5.53	0.55	0.00	—	19.4
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	5.53	0.00	5.53	0.55	0.00	—	19.4

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13.0	13.0
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13.0	13.0
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13.0	13.0
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13.0	13.0

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.15	2.15
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.15	2.15

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
General Heavy Industry	615	1,004	796	254,066	12,517	20,450	16,214	5,175,008
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	75,000	25,000	6,000

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	270

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
General Heavy Industry	1,518,721	0.00	0.0000	0.0000	1,624,230
Parking Lot	87,600	0.00	0.0000	0.0000	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
General Heavy Industry	418,045,448	7,400,946
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
General Heavy Industry	62.0	—
Parking Lot	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
General Heavy Industry	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	32.8	annual days of extreme heat
Extreme Precipitation	0.00	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.19	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A

Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	11.6
AQ-PM	19.1
AQ-DPM	9.09
Drinking Water	30.6
Lead Risk Housing	50.8
Pesticides	90.5
Toxic Releases	7.58
Traffic	3.06
Effect Indicators	—
CleanUp Sites	74.2
Groundwater	77.9
Haz Waste Facilities/Generators	93.2
Impaired Water Bodies	100.0
Solid Waste	86.5
Sensitive Population	—
Asthma	87.6
Cardio-vascular	83.2
Low Birth Weights	26.9
Socioeconomic Factor Indicators	—
Education	82.7
Housing	51.4
Linguistic	88.8
Poverty	94.9
Unemployment	99.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	16.66880534
Employed	7.173104068
Median HI	5.299627871
Education	—
Bachelor's or higher	5.017323239
High school enrollment	16.8741178
Preschool enrollment	68.89516233
Transportation	—
Auto Access	18.40112922
Active commuting	51.10997049
Social	—
2-parent households	13.28114975
Voting	16.79712563
Neighborhood	—
Alcohol availability	70.25535737
Park access	33.85089183
Retail density	4.311561658
Supermarket access	49.58295907
Tree canopy	0.782753753
Housing	—
Homeownership	38.3036058
Housing habitability	30.96368536
Low-inc homeowner severe housing cost burden	26.76761196
Low-inc renter severe housing cost burden	52.89362248

Uncrowded housing	38.58591043
Health Outcomes	—
Insured adults	21.00603105
Arthritis	0.0
Asthma ER Admissions	30.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	41.7
Cognitively Disabled	50.3
Physically Disabled	19.5
Heart Attack ER Admissions	46.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	54.3
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0

Children	14.1
Elderly	42.0
English Speaking	18.7
Foreign-born	65.3
Outdoor Workers	5.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	85.8
Traffic Density	4.9
Traffic Access	23.0
Other Indices	—
Hardship	92.9
Other Decision Support	—
2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	82.0
Healthy Places Index Score for Project Location (b)	11.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Land use data are based on applicant-provided buildout assumptions.
Operations: Vehicle Data	Trip rates are based on ITE Land Use Code 170.
Operations: Landscape Equipment	Assumed 270 summer days for desert region.
Operations: Road Dust	All roads used by future developments projects within the Specific Plan Area would be required to be paved. Per ICAPCD guidance a value of 85% paved is assumed in the modeling to account for the high levels of entrained dust generated from vehicle travel on paved roadways in the region.
Operations: Water and Waste Water	Water data are based on applicant-provided calculations for the land use.
Operations: Off-Road Equipment	Assumed a tractor/loader/backhoe as part of project operations.
Characteristics: Utility Information	GHG intensity factors adjusted per RPS requirements.

Lithium Valley Operation - Phase 2 - Automobile Manufacturing Detailed Report

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4.9.1. Unmitigated

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

5.10.3. Landscape Equipment

5.11. Operational Energy Consumption

5.11.1. Unmitigated

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

5.13. Operational Waste Generation

5.13.1. Unmitigated

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

5.16.2. Process Boilers

5.17. User Defined

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

5.18.2. Sequestration

5.18.2.1. Unmitigated

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

6.2. Initial Climate Risk Scores

6.3. Adjusted Climate Risk Scores

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

7.2. Healthy Places Index Scores

7.3. Overall Health & Equity Scores

7.4. Health & Equity Measures

7.5. Evaluation Scorecard

7.6. Health & Equity Custom Measures

8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Lithium Valley Operation - Phase 2 - Automobile Manufacturing
Operational Year	2045
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	4.80
Location	33.18829759139308, -115.6026869228474
County	Imperial
City	Unincorporated
Air District	Imperial County APCD
Air Basin	Salton Sea
TAZ	5600
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Manufacturing	359	1000sqft	257	359,444	179,722	—	—	—
Parking Lot	1,797	1000sqft	41.3	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	22.4	21.1	14.5	149	0.42	0.56	6,377	6,378	0.55	640	641	338	44,183	44,521	35.1	1.59	105	45,977
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	18.5	17.5	15.6	87.1	0.37	0.54	6,377	6,378	0.53	640	641	338	39,207	39,545	35.1	1.65	93.9	41,009
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	17.6	16.7	10.3	82.8	0.27	0.40	4,364	4,364	0.39	438	439	338	29,543	29,881	34.8	1.20	96.9	31,207
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.21	3.05	1.88	15.1	0.05	0.07	796	796	0.07	80.0	80.0	55.9	4,891	4,947	5.77	0.20	16.0	5,167

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	8.92	8.10	8.97	128	0.39	0.18	6,377	6,378	0.17	640	641	—	39,957	39,957	0.70	1.34	11.2	40,386

Area	12.2	12.0	0.13	15.6	< 0.005	0.03	—	0.03	0.02	—	0.02	—	64.3	64.3	< 0.005	< 0.005	—	64.5
Energy	0.34	0.17	3.14	2.63	0.02	0.24	—	0.24	0.24	—	0.24	—	3,742	3,742	0.33	0.01	—	3,752
Water	—	—	—	—	—	—	—	—	—	—	—	97.7	0.00	97.7	10.0	0.24	—	419
Waste	—	—	—	—	—	—	—	—	—	—	—	240	0.00	240	24.0	0.00	—	840
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	93.6	93.6
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	0.90	0.82	2.29	2.09	< 0.005	0.12	0.00	0.12	0.12	0.00	0.12	0.00	420	420	0.02	< 0.005	0.00	421
Total	22.4	21.1	14.5	149	0.42	0.56	6,377	6,378	0.55	640	641	338	44,183	44,521	35.1	1.59	105	45,977
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	7.87	7.07	10.1	82.4	0.34	0.18	6,377	6,378	0.17	640	641	—	35,045	35,045	0.70	1.41	0.29	35,482
Area	9.41	9.41	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.34	0.17	3.14	2.63	0.02	0.24	—	0.24	0.24	—	0.24	—	3,742	3,742	0.33	0.01	—	3,752
Water	—	—	—	—	—	—	—	—	—	—	—	97.7	0.00	97.7	10.0	0.24	—	419
Waste	—	—	—	—	—	—	—	—	—	—	—	240	0.00	240	24.0	0.00	—	840
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	93.6	93.6
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	0.90	0.82	2.29	2.09	< 0.005	0.12	0.00	0.12	0.12	0.00	0.12	0.00	420	420	0.02	< 0.005	0.00	421
Total	18.5	17.5	15.6	87.1	0.37	0.54	6,377	6,378	0.53	640	641	338	39,207	39,545	35.1	1.65	93.9	41,009
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	5.66	5.11	6.78	68.3	0.25	0.12	4,364	4,364	0.12	438	438	—	25,696	25,696	0.48	0.96	3.35	25,997
Area	11.5	11.3	0.10	11.6	< 0.005	0.02	—	0.02	0.02	—	0.02	—	47.6	47.6	< 0.005	< 0.005	—	47.7
Energy	0.34	0.17	3.14	2.63	0.02	0.24	—	0.24	0.24	—	0.24	—	3,742	3,742	0.33	0.01	—	3,752
Water	—	—	—	—	—	—	—	—	—	—	—	97.7	0.00	97.7	10.0	0.24	—	419
Waste	—	—	—	—	—	—	—	—	—	—	—	240	0.00	240	24.0	0.00	—	840

Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	93.6	93.6
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	0.12	0.11	0.31	0.29	< 0.005	0.02	0.00	0.02	0.02	0.00	0.02	0.00	57.5	57.5	< 0.005	< 0.005	0.00	57.7
Total	17.6	16.7	10.3	82.8	0.27	0.40	4,364	4,364	0.39	438	439	338	29,543	29,881	34.8	1.20	96.9	31,207
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.03	0.93	1.24	12.5	0.05	0.02	796	796	0.02	80.0	80.0	—	4,254	4,254	0.08	0.16	0.55	4,304
Area	2.09	2.06	0.02	2.11	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.87	7.87	< 0.005	< 0.005	—	7.90
Energy	0.06	0.03	0.57	0.48	< 0.005	0.04	—	0.04	0.04	—	0.04	—	620	620	0.05	< 0.005	—	621
Water	—	—	—	—	—	—	—	—	—	—	—	16.2	0.00	16.2	1.66	0.04	—	69.4
Waste	—	—	—	—	—	—	—	—	—	—	—	39.8	0.00	39.8	3.97	0.00	—	139
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15.5	15.5
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	0.02	0.02	0.06	0.05	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	9.52	9.52	< 0.005	< 0.005	0.00	9.55
Total	3.21	3.05	1.88	15.1	0.05	0.07	796	796	0.07	80.0	80.0	55.9	4,891	4,947	5.77	0.20	16.0	5,167

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Manufacturing	8.92	8.10	8.97	128	0.39	0.18	6,377	6,378	0.17	640	641	—	39,957	39,957	0.70	1.34	11.2	40,386
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	8.92	8.10	8.97	128	0.39	0.18	6,377	6,378	0.17	640	641	—	39,957	39,957	0.70	1.34	11.2	40,386
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	7.87	7.07	10.1	82.4	0.34	0.18	6,377	6,378	0.17	640	641	—	35,045	35,045	0.70	1.41	0.29	35,482
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	7.87	7.07	10.1	82.4	0.34	0.18	6,377	6,378	0.17	640	641	—	35,045	35,045	0.70	1.41	0.29	35,482
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	1.03	0.93	1.24	12.5	0.05	0.02	796	796	0.02	80.0	80.0	—	4,254	4,254	0.08	0.16	0.55	4,304
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	1.03	0.93	1.24	12.5	0.05	0.02	796	796	0.02	80.0	80.0	—	4,254	4,254	0.08	0.16	0.55	4,304

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

undefine	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
undefined	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
undefined	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	0.34	0.17	3.14	2.63	0.02	0.24	—	0.24	0.24	—	0.24	—	3,742	3,742	0.33	0.01	—	3,752
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.34	0.17	3.14	2.63	0.02	0.24	—	0.24	0.24	—	0.24	—	3,742	3,742	0.33	0.01	—	3,752

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	0.34	0.17	3.14	2.63	0.02	0.24	—	0.24	0.24	—	0.24	—	3,742	3,742	0.33	0.01	—	3,752
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.34	0.17	3.14	2.63	0.02	0.24	—	0.24	0.24	—	0.24	—	3,742	3,742	0.33	0.01	—	3,752
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	0.06	0.03	0.57	0.48	< 0.005	0.04	—	0.04	0.04	—	0.04	—	620	620	0.05	< 0.005	—	621
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.06	0.03	0.57	0.48	< 0.005	0.04	—	0.04	0.04	—	0.04	—	620	620	0.05	< 0.005	—	621

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	7.83	7.83	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	1.58	1.58	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	2.78	2.57	0.13	15.6	< 0.005	0.03	—	0.03	0.02	—	0.02	—	64.3	64.3	< 0.005	< 0.005	—	64.5

Total	12.2	12.0	0.13	15.6	< 0.005	0.03	—	0.03	0.02	—	0.02	—	64.3	64.3	< 0.005	< 0.005	—	64.5
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	7.83	7.83	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	1.58	1.58	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	9.41	9.41	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	1.43	1.43	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.29	0.29	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.38	0.35	0.02	2.11	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.87	7.87	< 0.005	< 0.005	—	7.90
Total	2.09	2.06	0.02	2.11	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.87	7.87	< 0.005	< 0.005	—	7.90

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	97.7	0.00	97.7	10.0	0.24	—	419
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	97.7	0.00	97.7	10.0	0.24	—	419
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	97.7	0.00	97.7	10.0	0.24	—	419
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	97.7	0.00	97.7	10.0	0.24	—	419
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	16.2	0.00	16.2	1.66	0.04	—	69.4
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	16.2	0.00	16.2	1.66	0.04	—	69.4

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	240	0.00	240	24.0	0.00	—	840

Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	240	0.00	240	24.0	0.00	—	840
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	240	0.00	240	24.0	0.00	—	840
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	240	0.00	240	24.0	0.00	—	840
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	39.8	0.00	39.8	3.97	0.00	—	139
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	39.8	0.00	39.8	3.97	0.00	—	139

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	93.6	93.6
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	93.6	93.6
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Manufac	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	93.6	93.6
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	93.6	93.6
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15.5	15.5
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15.5	15.5

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.90	0.82	2.29	2.09	< 0.005	0.12	0.00	0.12	0.12	0.00	0.12	0.00	420	420	0.02	< 0.005	0.00	421
Total	0.90	0.82	2.29	2.09	< 0.005	0.12	0.00	0.12	0.12	0.00	0.12	0.00	420	420	0.02	< 0.005	0.00	421
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.90	0.82	2.29	2.09	< 0.005	0.12	0.00	0.12	0.12	0.00	0.12	0.00	420	420	0.02	< 0.005	0.00	421
Total	0.90	0.82	2.29	2.09	< 0.005	0.12	0.00	0.12	0.12	0.00	0.12	0.00	420	420	0.02	< 0.005	0.00	421
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.02	0.02	0.06	0.05	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	9.52	9.52	< 0.005	< 0.005	0.00	9.55
Total	0.02	0.02	0.06	0.05	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	9.52	9.52	< 0.005	< 0.005	0.00	9.55

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Manufacturing	1,707	2,789	2,211	705,840	34,777	56,814	45,027	14,377,075
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	539,166	179,722	107,837

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	270

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Manufacturing	10,917,905	0.00	0.0000	0.0000	11,676,396
Parking Lot	1,574,422	0.00	0.0000	0.0000	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Manufacturing	50,966,882	255,755
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Manufacturing	446	—
Parking Lot	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Manufacturing	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Forklifts	Electric	Average	43.0	8.00	200	0.20

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
Emergency Generator	Diesel	1.00	1.00	50.0	500	0.73

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	32.8	annual days of extreme heat
Extreme Precipitation	0.00	annual days with precipitation above 20 mm

Sea Level Rise	—	meters of inundation depth
Wildfire	0.19	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A

Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	11.6
AQ-PM	19.1
AQ-DPM	9.09
Drinking Water	30.6
Lead Risk Housing	50.8
Pesticides	90.5
Toxic Releases	7.58
Traffic	3.06
Effect Indicators	—

CleanUp Sites	74.2
Groundwater	77.9
Haz Waste Facilities/Generators	93.2
Impaired Water Bodies	100.0
Solid Waste	86.5
Sensitive Population	—
Asthma	87.6
Cardio-vascular	83.2
Low Birth Weights	26.9
Socioeconomic Factor Indicators	—
Education	82.7
Housing	51.4
Linguistic	88.8
Poverty	94.9
Unemployment	99.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	16.66880534
Employed	7.173104068
Median HI	5.299627871
Education	—
Bachelor's or higher	5.017323239
High school enrollment	16.8741178
Preschool enrollment	68.89516233
Transportation	—

Auto Access	18.40112922
Active commuting	51.10997049
Social	—
2-parent households	13.28114975
Voting	16.79712563
Neighborhood	—
Alcohol availability	70.25535737
Park access	33.85089183
Retail density	4.311561658
Supermarket access	49.58295907
Tree canopy	0.782753753
Housing	—
Homeownership	38.3036058
Housing habitability	30.96368536
Low-inc homeowner severe housing cost burden	26.76761196
Low-inc renter severe housing cost burden	52.89362248
Uncrowded housing	38.58591043
Health Outcomes	—
Insured adults	21.00603105
Arthritis	0.0
Asthma ER Admissions	30.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	41.7

Cognitively Disabled	50.3
Physically Disabled	19.5
Heart Attack ER Admissions	46.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	54.3
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	14.1
Elderly	42.0
English Speaking	18.7
Foreign-born	65.3
Outdoor Workers	5.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	85.8
Traffic Density	4.9
Traffic Access	23.0
Other Indices	—
Hardship	92.9
Other Decision Support	—

2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	82.0
Healthy Places Index Score for Project Location (b)	11.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Land use data are based on applicant-provided buildout assumptions.
Operations: Landscape Equipment	Assumed 270 summer days for desert region.
Operations: Vehicle Data	Trip rates are based on ITE Land Use Code 140.
Operations: Road Dust	All roads used by future developments projects within the Specific Plan Area would be required to be paved. Per ICAPCD guidance a value of 85% paved is assumed in the modeling to account for the high levels of entrained dust generated from vehicle travel on paved roadways in the region

Operations: Off-Road Equipment	Assumed offroad equipment as part of project operations. Number of equipment based on SCAQMD Study (0.12 per KSF).
Operations: Water and Waste Water	Applicant supplied water information
Characteristics: Utility Information	GHG intensity factors adjusted per RPS requirements

Lithium Valley Operation - Phase 2 - Battery Manufacturing Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Lithium Valley Operation - Phase 2 - Battery Manufacturing
Operational Year	2045
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	4.80
Location	33.18829759139308, -115.6026869228474
County	Imperial
City	Unincorporated
Air District	Imperial County APCD
Air Basin	Salton Sea
TAZ	5600
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Manufacturing	2,919	1000sqft	2,103	2,918,740	1,459,370	—	—	—
Parking Lot	14,594	1000sqft	335	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	176	166	119	1,191	3.44	4.23	51,787	51,791	4.08	5,200	5,204	4,460	365,075	369,535	461	18.9	852	387,545
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	145	137	128	693	3.04	4.00	51,787	51,791	3.91	5,200	5,204	4,460	325,104	329,564	461	19.4	762	347,631
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	142	135	91.6	668	2.27	3.33	35,434	35,437	3.23	3,558	3,562	4,460	245,633	250,093	459	15.2	787	266,888
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	25.9	24.6	16.7	122	0.41	0.61	6,467	6,467	0.59	649	650	738	40,667	41,406	76.0	2.52	130	44,186

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	71.8	65.1	85.3	1,036	3.27	1.70	51,787	51,789	1.61	5,200	5,202	—	332,907	332,907	5.69	12.7	92.6	336,938

Area	99.0	97.3	1.07	127	0.01	0.23	—	0.23	0.17	—	0.17	—	522	522	0.02	< 0.005	—	524
Energy	2.80	1.40	25.5	21.4	0.15	1.94	—	1.94	1.94	—	1.94	—	30,387	30,387	2.69	0.06	—	30,471
Water	—	—	—	—	—	—	—	—	—	—	—	2,510	0.00	2,510	257	6.11	—	10,765
Waste	—	—	—	—	—	—	—	—	—	—	—	1,951	0.00	1,951	195	0.00	—	6,824
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	760	760
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	2.70	2.46	6.88	6.28	0.01	0.36	0.00	0.36	0.36	0.00	0.36	0.00	1,259	1,259	0.05	0.01	0.00	1,263
Total	176	166	119	1,191	3.44	4.23	51,787	51,791	4.08	5,200	5,204	4,460	365,075	369,535	461	18.9	852	387,545
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	63.4	56.9	96.0	666	2.88	1.70	51,787	51,789	1.61	5,200	5,202	—	293,458	293,458	5.74	13.2	2.40	297,548
Area	76.4	76.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	2.80	1.40	25.5	21.4	0.15	1.94	—	1.94	1.94	—	1.94	—	30,387	30,387	2.69	0.06	—	30,471
Water	—	—	—	—	—	—	—	—	—	—	—	2,510	0.00	2,510	257	6.11	—	10,765
Waste	—	—	—	—	—	—	—	—	—	—	—	1,951	0.00	1,951	195	0.00	—	6,824
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	760	760
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	2.70	2.46	6.88	6.28	0.01	0.36	0.00	0.36	0.36	0.00	0.36	0.00	1,259	1,259	0.05	0.01	0.00	1,263
Total	145	137	128	693	3.04	4.00	51,787	51,791	3.91	5,200	5,204	4,460	325,104	329,564	461	19.4	762	347,631
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	45.6	41.1	64.4	551	2.11	1.18	35,434	35,435	1.12	3,558	3,559	—	214,687	214,687	3.92	9.04	27.7	217,508
Area	93.1	91.8	0.79	93.9	0.01	0.17	—	0.17	0.13	—	0.13	—	386	386	0.02	< 0.005	—	388
Energy	2.80	1.40	25.5	21.4	0.15	1.94	—	1.94	1.94	—	1.94	—	30,387	30,387	2.69	0.06	—	30,471
Water	—	—	—	—	—	—	—	—	—	—	—	2,510	0.00	2,510	257	6.11	—	10,765
Waste	—	—	—	—	—	—	—	—	—	—	—	1,951	0.00	1,951	195	0.00	—	6,824

Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	760	760
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	0.37	0.34	0.94	0.86	< 0.005	0.05	0.00	0.05	0.05	0.00	0.05	0.00	173	173	0.01	< 0.005	0.00	173
Total	142	135	91.6	668	2.27	3.33	35,434	35,437	3.23	3,558	3,562	4,460	245,633	250,093	459	15.2	787	266,888
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	8.33	7.50	11.7	101	0.38	0.22	6,467	6,467	0.20	649	650	—	35,544	35,544	0.65	1.50	4.59	36,011
Area	17.0	16.8	0.14	17.1	< 0.005	0.03	—	0.03	0.02	—	0.02	—	63.9	63.9	< 0.005	< 0.005	—	64.2
Energy	0.51	0.26	4.65	3.90	0.03	0.35	—	0.35	0.35	—	0.35	—	5,031	5,031	0.45	0.01	—	5,045
Water	—	—	—	—	—	—	—	—	—	—	—	415	0.00	415	42.6	1.01	—	1,782
Waste	—	—	—	—	—	—	—	—	—	—	—	323	0.00	323	32.3	0.00	—	1,130
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	126	126
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	0.07	0.06	0.17	0.16	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	28.6	28.6	< 0.005	< 0.005	0.00	28.7
Total	25.9	24.6	16.7	122	0.41	0.61	6,467	6,467	0.59	649	650	738	40,667	41,406	76.0	2.52	130	44,186

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Manufacturing	71.8	65.1	85.3	1,036	3.27	1.70	51,787	51,789	1.61	5,200	5,202	—	332,907	332,907	5.69	12.7	92.6	336,938
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	71.8	65.1	85.3	1,036	3.27	1.70	51,787	51,789	1.61	5,200	5,202	—	332,907	332,907	5.69	12.7	92.6	336,938
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	63.4	56.9	96.0	666	2.88	1.70	51,787	51,789	1.61	5,200	5,202	—	293,458	293,458	5.74	13.2	2.40	297,548
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	63.4	56.9	96.0	666	2.88	1.70	51,787	51,789	1.61	5,200	5,202	—	293,458	293,458	5.74	13.2	2.40	297,548
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	8.33	7.50	11.7	101	0.38	0.22	6,467	6,467	0.20	649	650	—	35,544	35,544	0.65	1.50	4.59	36,011
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	8.33	7.50	11.7	101	0.38	0.22	6,467	6,467	0.20	649	650	—	35,544	35,544	0.65	1.50	4.59	36,011

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

undefine	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
undefined	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
undefined	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	2.80	1.40	25.5	21.4	0.15	1.94	—	1.94	1.94	—	1.94	—	30,387	30,387	2.69	0.06	—	30,471
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	2.80	1.40	25.5	21.4	0.15	1.94	—	1.94	1.94	—	1.94	—	30,387	30,387	2.69	0.06	—	30,471

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	2.80	1.40	25.5	21.4	0.15	1.94	—	1.94	1.94	—	1.94	—	30,387	30,387	2.69	0.06	—	30,471
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	2.80	1.40	25.5	21.4	0.15	1.94	—	1.94	1.94	—	1.94	—	30,387	30,387	2.69	0.06	—	30,471
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	0.51	0.26	4.65	3.90	0.03	0.35	—	0.35	0.35	—	0.35	—	5,031	5,031	0.45	0.01	—	5,045
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.51	0.26	4.65	3.90	0.03	0.35	—	0.35	0.35	—	0.35	—	5,031	5,031	0.45	0.01	—	5,045

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	63.6	63.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	12.8	12.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	22.6	20.9	1.07	127	0.01	0.23	—	0.23	0.17	—	0.17	—	522	522	0.02	< 0.005	—	524

Total	99.0	97.3	1.07	127	0.01	0.23	—	0.23	0.17	—	0.17	—	522	522	0.02	< 0.005	—	524
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	63.6	63.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	12.8	12.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	76.4	76.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	11.6	11.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	2.33	2.33	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	3.05	2.82	0.14	17.1	< 0.005	0.03	—	0.03	0.02	—	0.02	—	63.9	63.9	< 0.005	< 0.005	—	64.2
Total	17.0	16.8	0.14	17.1	< 0.005	0.03	—	0.03	0.02	—	0.02	—	63.9	63.9	< 0.005	< 0.005	—	64.2

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	2,510	0.00	2,510	257	6.11	—	10,765
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	2,510	0.00	2,510	257	6.11	—	10,765
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	2,510	0.00	2,510	257	6.11	—	10,765
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	2,510	0.00	2,510	257	6.11	—	10,765
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	415	0.00	415	42.6	1.01	—	1,782
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	415	0.00	415	42.6	1.01	—	1,782

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	1,951	0.00	1,951	195	0.00	—	6,824

Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1,951	0.00	1,951	195	0.00	—	6,824
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	1,951	0.00	1,951	195	0.00	—	6,824
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1,951	0.00	1,951	195	0.00	—	6,824
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	323	0.00	323	32.3	0.00	—	1,130
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	323	0.00	323	32.3	0.00	—	1,130

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	760	760
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	760	760
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Manufac	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	760	760
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	760	760
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	126	126
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	126	126

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	2.70	2.46	6.88	6.28	0.01	0.36	0.00	0.36	0.36	0.00	0.36	0.00	1,259	1,259	0.05	0.01	0.00	1,263
Total	2.70	2.46	6.88	6.28	0.01	0.36	0.00	0.36	0.36	0.00	0.36	0.00	1,259	1,259	0.05	0.01	0.00	1,263
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	2.70	2.46	6.88	6.28	0.01	0.36	0.00	0.36	0.36	0.00	0.36	0.00	1,259	1,259	0.05	0.01	0.00	1,263
Total	2.70	2.46	6.88	6.28	0.01	0.36	0.00	0.36	0.36	0.00	0.36	0.00	1,259	1,259	0.05	0.01	0.00	1,263
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.07	0.06	0.17	0.16	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	28.6	28.6	< 0.005	< 0.005	0.00	28.7
Total	0.07	0.06	0.17	0.16	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	28.6	28.6	< 0.005	< 0.005	0.00	28.7

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Manufacturing	13,864	22,649	17,950	5,731,530	282,393	461,340	365,624	116,744,103
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	4,378,110	1,459,370	875,622

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	270

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Manufacturing	88,655,052	0.00	0.0000	0.0000	94,814,110
Parking Lot	12,784,082	0.00	0.0000	0.0000	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Manufacturing	1,309,617,275	57,962,642
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Manufacturing	3,619	—
Parking Lot	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Manufacturing	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Forklifts	Electric	Average	350	8.00	200	0.20

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
Emergency Generator	Diesel	3.00	1.00	50.0	500	0.73

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	32.8	annual days of extreme heat
Extreme Precipitation	0.00	annual days with precipitation above 20 mm

Sea Level Rise	—	meters of inundation depth
Wildfire	0.19	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A

Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	11.6
AQ-PM	19.1
AQ-DPM	9.09
Drinking Water	30.6
Lead Risk Housing	50.8
Pesticides	90.5
Toxic Releases	7.58
Traffic	3.06
Effect Indicators	—

CleanUp Sites	74.2
Groundwater	77.9
Haz Waste Facilities/Generators	93.2
Impaired Water Bodies	100.0
Solid Waste	86.5
Sensitive Population	—
Asthma	87.6
Cardio-vascular	83.2
Low Birth Weights	26.9
Socioeconomic Factor Indicators	—
Education	82.7
Housing	51.4
Linguistic	88.8
Poverty	94.9
Unemployment	99.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	16.66880534
Employed	7.173104068
Median HI	5.299627871
Education	—
Bachelor's or higher	5.017323239
High school enrollment	16.8741178
Preschool enrollment	68.89516233
Transportation	—

Auto Access	18.40112922
Active commuting	51.10997049
Social	—
2-parent households	13.28114975
Voting	16.79712563
Neighborhood	—
Alcohol availability	70.25535737
Park access	33.85089183
Retail density	4.311561658
Supermarket access	49.58295907
Tree canopy	0.782753753
Housing	—
Homeownership	38.3036058
Housing habitability	30.96368536
Low-inc homeowner severe housing cost burden	26.76761196
Low-inc renter severe housing cost burden	52.89362248
Uncrowded housing	38.58591043
Health Outcomes	—
Insured adults	21.00603105
Arthritis	0.0
Asthma ER Admissions	30.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	41.7

Cognitively Disabled	50.3
Physically Disabled	19.5
Heart Attack ER Admissions	46.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	54.3
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	14.1
Elderly	42.0
English Speaking	18.7
Foreign-born	65.3
Outdoor Workers	5.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	85.8
Traffic Density	4.9
Traffic Access	23.0
Other Indices	—
Hardship	92.9
Other Decision Support	—

2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	82.0
Healthy Places Index Score for Project Location (b)	11.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Land use data are based on applicant-provided buildout assumptions.
Operations: Vehicle Data	Trip rates are based on ITE Land Use Code 140.
Operations: Landscape Equipment	Assumed 270 summer days for desert region.
Operations: Emergency Generators and Fire Pumps	Assumed 3 back-up generators each operating 1 hour/day and 50 hours/year for maintenance and testing.

Operations: Road Dust	All roads used by future developments projects within the Specific Plan Area would be required to be paved. Per ICAPCD guidance a value of 85% paved is assumed in the modeling to account for the high levels of entrained dust generated from vehicle travel on paved roadways in the region.
Operations: Water and Waste Water	Water data are based on applicant-provided calculations for the land use.
Operations: Off-Road Equipment	Electric forklifts assumed as part of project operations.
Characteristics: Utility Information	GHG intensity factors adjusted per RPS requirements.

Lithium Valley Operation - Phase 2 - BESS Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Lithium Valley Operation - Phase 2 - BESS
Operational Year	2045
Lead Agency	—
Land Use Scale	Plan/community
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	4.80
Location	33.18829759139308, -115.6026869228474
County	Imperial
City	Unincorporated
Air District	Imperial County APCD
Air Basin	Salton Sea
TAZ	5600
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
General Heavy Industry	1,290	1000sqft	1,277	1,289,648	257,930	—	—	—
Parking Lot	2,579	1000sqft	59.2	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	43.9	43.1	2.77	58.3	0.01	0.22	5.39	5.61	0.20	0.54	0.74	862	685	1,547	86.2	0.01	626	4,328
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	33.9	33.8	2.30	2.16	< 0.005	0.12	5.39	5.51	0.12	0.54	0.66	862	450	1,312	86.2	< 0.005	626	4,093
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	40.5	39.9	0.67	41.8	< 0.005	0.09	3.80	3.89	0.07	0.38	0.45	862	251	1,113	86.1	< 0.005	626	3,893
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	7.40	7.29	0.12	7.64	< 0.005	0.02	0.69	0.71	0.01	0.07	0.08	143	41.6	184	14.3	< 0.005	104	645

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.01	0.01	0.01	0.11	< 0.005	< 0.005	5.39	5.39	< 0.005	0.54	0.54	—	34.6	34.6	< 0.005	< 0.005	0.01	35.0

Area	43.0	42.2	0.47	56.1	< 0.005	0.10	—	0.10	0.08	—	0.08	—	231	231	0.01	< 0.005	—	231
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	862	0.00	862	86.1	0.00	—	3,015
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	626	626
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	0.90	0.82	2.29	2.09	< 0.005	0.12	0.00	0.12	0.12	0.00	0.12	0.00	420	420	0.02	< 0.005	0.00	421
Total	43.9	43.1	2.77	58.3	0.01	0.22	5.39	5.61	0.20	0.54	0.74	862	685	1,547	86.2	0.01	626	4,328
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.01	0.01	0.01	0.07	< 0.005	< 0.005	5.39	5.39	< 0.005	0.54	0.54	—	30.5	30.5	< 0.005	< 0.005	< 0.005	30.9
Area	33.0	33.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	862	0.00	862	86.1	0.00	—	3,015
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	626	626
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	0.90	0.82	2.29	2.09	< 0.005	0.12	0.00	0.12	0.12	0.00	0.12	0.00	420	420	0.02	< 0.005	0.00	421
Total	33.9	33.8	2.30	2.16	< 0.005	0.12	5.39	5.51	0.12	0.54	0.66	862	450	1,312	86.2	< 0.005	626	4,093
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	< 0.005	< 0.005	0.01	0.06	< 0.005	< 0.005	3.80	3.80	< 0.005	0.38	0.38	—	23.0	23.0	< 0.005	< 0.005	< 0.005	23.3
Area	40.4	39.8	0.35	41.5	< 0.005	0.07	—	0.07	0.06	—	0.06	—	171	171	0.01	< 0.005	—	171
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	862	0.00	862	86.1	0.00	—	3,015

Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	626	626
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	0.12	0.11	0.31	0.29	< 0.005	0.02	0.00	0.02	0.02	0.00	0.02	0.00	57.5	57.5	< 0.005	< 0.005	0.00	57.7
Total	40.5	39.9	0.67	41.8	< 0.005	0.09	3.80	3.89	0.07	0.38	0.45	862	251	1,113	86.1	< 0.005	626	3,893
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	0.69	0.69	< 0.005	0.07	0.07	—	3.80	3.80	< 0.005	< 0.005	< 0.005	3.85
Area	7.37	7.27	0.06	7.57	< 0.005	0.01	—	0.01	0.01	—	0.01	—	28.2	28.2	< 0.005	< 0.005	—	28.3
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	143	0.00	143	14.3	0.00	—	499
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	104	104
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	0.02	0.02	0.06	0.05	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	9.52	9.52	< 0.005	< 0.005	0.00	9.55
Total	7.40	7.29	0.12	7.64	< 0.005	0.02	0.69	0.71	0.01	0.07	0.08	143	41.6	184	14.3	< 0.005	104	645

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Mobile source emissions results are presented in Sections 2.6. No further detailed breakdown of emissions is available.

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
undefined	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
undefined	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
undefined	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	27.8	27.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	5.21	5.21	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	9.99	9.22	0.47	56.1	< 0.005	0.10	—	0.10	0.08	—	0.08	—	231	231	0.01	< 0.005	—	231
Total	43.0	42.2	0.47	56.1	< 0.005	0.10	—	0.10	0.08	—	0.08	—	231	231	0.01	< 0.005	—	231
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	27.8	27.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	5.21	5.21	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	33.0	33.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	5.07	5.07	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architectural Coating	0.95	0.95	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	1.35	1.24	0.06	7.57	< 0.005	0.01	—	0.01	0.01	—	0.01	—	28.2	28.2	< 0.005	< 0.005	—	28.3
Total	7.37	7.27	0.06	7.57	< 0.005	0.01	—	0.01	0.01	—	0.01	—	28.2	28.2	< 0.005	< 0.005	—	28.3

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	862	0.00	862	86.1	0.00	—	3,015
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	862	0.00	862	86.1	0.00	—	3,015
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	862	0.00	862	86.1	0.00	—	3,015
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	862	0.00	862	86.1	0.00	—	3,015
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	143	0.00	143	14.3	0.00	—	499
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	143	0.00	143	14.3	0.00	—	499

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	626	626
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	626	626
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	626	626
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	626	626
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	104	104
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	104	104

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cranes	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cranes	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cranes	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Emergency	0.90	0.82	2.29	2.09	< 0.005	0.12	0.00	0.12	0.12	0.00	0.12	0.00	420	420	0.02	< 0.005	0.00	421
Total	0.90	0.82	2.29	2.09	< 0.005	0.12	0.00	0.12	0.12	0.00	0.12	0.00	420	420	0.02	< 0.005	0.00	421
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.90	0.82	2.29	2.09	< 0.005	0.12	0.00	0.12	0.12	0.00	0.12	0.00	420	420	0.02	< 0.005	0.00	421
Total	0.90	0.82	2.29	2.09	< 0.005	0.12	0.00	0.12	0.12	0.00	0.12	0.00	420	420	0.02	< 0.005	0.00	421
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.02	0.02	0.06	0.05	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	9.52	9.52	< 0.005	< 0.005	0.00	9.55
Total	0.02	0.02	0.06	0.05	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	9.52	9.52	< 0.005	< 0.005	0.00	9.55

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Total all Land Uses	2.00	0.00	0.00	521	48.0	0.00	0.00	12,514

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	1,934,472	644,824	154,751

5.10.3. Landscape Equipment

Season	Unit	Value

Snow Days	day/yr	0.00
Summer Days	day/yr	270

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
General Heavy Industry	14,600,000	0.00	0.0000	0.0000	0.00
Parking Lot	2,259,368	0.00	0.0000	0.0000	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
General Heavy Industry	0.00	660,980,101
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
General Heavy Industry	1,599	—
Parking Lot	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
General Heavy Industry	User Defined	User Defined	23,900	0.31	0.50	0.50	30.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Cranes	Electric	Average	1.00	8.00	367	0.29

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
Emergency Generator	Diesel	1.00	1.00	50.0	500	0.73

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	32.8	annual days of extreme heat
Extreme Precipitation	0.00	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.19	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	11.6
AQ-PM	19.1
AQ-DPM	9.09
Drinking Water	30.6
Lead Risk Housing	50.8
Pesticides	90.5
Toxic Releases	7.58
Traffic	3.06
Effect Indicators	—
CleanUp Sites	74.2
Groundwater	77.9
Haz Waste Facilities/Generators	93.2
Impaired Water Bodies	100.0
Solid Waste	86.5
Sensitive Population	—
Asthma	87.6
Cardio-vascular	83.2
Low Birth Weights	26.9

Socioeconomic Factor Indicators	—
Education	82.7
Housing	51.4
Linguistic	88.8
Poverty	94.9
Unemployment	99.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	16.66880534
Employed	7.173104068
Median HI	5.299627871
Education	—
Bachelor's or higher	5.017323239
High school enrollment	16.8741178
Preschool enrollment	68.89516233
Transportation	—
Auto Access	18.40112922
Active commuting	51.10997049
Social	—
2-parent households	13.28114975
Voting	16.79712563
Neighborhood	—
Alcohol availability	70.25535737
Park access	33.85089183
Retail density	4.311561658

Supermarket access	49.58295907
Tree canopy	0.782753753
Housing	—
Homeownership	38.3036058
Housing habitability	30.96368536
Low-inc homeowner severe housing cost burden	26.76761196
Low-inc renter severe housing cost burden	52.89362248
Uncrowded housing	38.58591043
Health Outcomes	—
Insured adults	21.00603105
Arthritis	0.0
Asthma ER Admissions	30.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	41.7
Cognitively Disabled	50.3
Physically Disabled	19.5
Heart Attack ER Admissions	46.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	54.3
Physical Health Not Good	0.0
Stroke	0.0

Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	14.1
Elderly	42.0
English Speaking	18.7
Foreign-born	65.3
Outdoor Workers	5.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	85.8
Traffic Density	4.9
Traffic Access	23.0
Other Indices	—
Hardship	92.9
Other Decision Support	—
2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	82.0
Healthy Places Index Score for Project Location (b)	11.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Land use data are based on applicant-provided buildout assumptions.
Operations: Energy Use	No natural gas. Energy demand kWh/year based on auxiliary energy consumption (2%) calculated based on an assumed 500 MW capacity, operating 4 hours/day and 365 days/year.
Operations: Water and Waste Water	Water data are based on applicant-provided calculations for the land use. No indoor water required for operations.
Operations: Off-Road Equipment	Project operations anticipated to require periodic maintenance that requires cranes to move battery units around every 3 years. Specific Plan requires electric offroad equipment.
Operations: Refrigerants	Assumed 1,000 pounds of SF6 as part of project operations for breakers/inverters.
Operations: Landscape Equipment	Assumed 270 summer days for desert region.
Operations: Emergency Generators and Fire Pumps	Assumed 1 back-up generator operating 1 hour/day and 50 hours/year as part of project operations.
Operations: Road Dust	All roads used by future developments projects within the Specific Plan Area would be required to be paved. Per ICAPCD guidance a value of 85% paved is assumed in the modeling to account for the high levels of entrained dust generated from vehicle travel on paved roadways in the region.
Characteristics: Utility Information	GHG intensity factors adjusted per RPS requirements.

Lithium Valley Operation - Phase 2 - Business Industrial Parks Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Lithium Valley Operation - Phase 2 - Business Industrial Parks
Operational Year	2045
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	4.80
Location	33.18829759139308, -115.6026869228474
County	Imperial
City	Unincorporated
Air District	Imperial County APCD
Air Basin	Salton Sea
TAZ	5600
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Industrial Park	1,173	1000sqft	628	1,172,823	586,411	—	—	—
Parking Lot	5,864	1000sqft	135	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	54.5	52.3	23.3	239	0.60	0.89	9,037	9,038	0.85	907	908	912	63,171	64,082	92.8	2.55	321	67,484
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	43.9	42.5	24.7	123	0.53	0.80	9,037	9,038	0.78	907	908	912	56,077	56,989	92.8	2.63	306	60,400
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	48.1	46.4	18.5	163	0.49	0.62	7,800	7,800	0.59	783	784	912	51,555	52,466	92.7	2.31	311	55,783
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	8.78	8.46	3.37	29.7	0.09	0.11	1,423	1,424	0.11	143	143	151	8,535	8,686	15.3	0.38	51.6	9,236

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	12.5	11.4	14.9	181	0.57	0.30	9,037	9,037	0.28	907	908	—	58,094	58,094	0.99	2.22	16.2	58,797

Area	39.8	39.1	0.43	51.0	< 0.005	0.09	—	0.09	0.07	—	0.07	—	210	210	0.01	< 0.005	—	211
Energy	0.37	0.19	3.38	2.84	0.02	0.26	—	0.26	0.26	—	0.26	—	4,028	4,028	0.36	0.01	—	4,039
Water	—	—	—	—	—	—	—	—	—	—	—	128	0.00	128	13.1	0.31	—	548
Waste	—	—	—	—	—	—	—	—	—	—	—	784	0.00	784	78.3	0.00	—	2,742
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	305	305
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	1.80	1.64	4.59	4.18	0.01	0.24	0.00	0.24	0.24	0.00	0.24	0.00	840	840	0.03	0.01	0.00	842
Total	54.5	52.3	23.3	239	0.60	0.89	9,037	9,038	0.85	907	908	912	63,171	64,082	92.8	2.55	321	67,484
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	11.1	9.93	16.7	116	0.50	0.30	9,037	9,037	0.28	907	908	—	51,210	51,210	1.00	2.31	0.42	51,923
Area	30.7	30.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.37	0.19	3.38	2.84	0.02	0.26	—	0.26	0.26	—	0.26	—	4,028	4,028	0.36	0.01	—	4,039
Water	—	—	—	—	—	—	—	—	—	—	—	128	0.00	128	13.1	0.31	—	548
Waste	—	—	—	—	—	—	—	—	—	—	—	784	0.00	784	78.3	0.00	—	2,742
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	305	305
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	1.80	1.64	4.59	4.18	0.01	0.24	0.00	0.24	0.24	0.00	0.24	0.00	840	840	0.03	0.01	0.00	842
Total	43.9	42.5	24.7	123	0.53	0.80	9,037	9,038	0.78	907	908	912	56,077	56,989	92.8	2.63	306	60,400
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	10.0	9.04	14.2	121	0.46	0.26	7,800	7,800	0.25	783	783	—	47,257	47,257	0.86	1.99	6.10	47,877
Area	37.4	36.9	0.32	37.7	< 0.005	0.07	—	0.07	0.05	—	0.05	—	155	155	0.01	< 0.005	—	156
Energy	0.37	0.19	3.38	2.84	0.02	0.26	—	0.26	0.26	—	0.26	—	4,028	4,028	0.36	0.01	—	4,039
Water	—	—	—	—	—	—	—	—	—	—	—	128	0.00	128	13.1	0.31	—	548
Waste	—	—	—	—	—	—	—	—	—	—	—	784	0.00	784	78.3	0.00	—	2,742

Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	305	305
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	0.25	0.22	0.63	0.57	< 0.005	0.03	0.00	0.03	0.03	0.00	0.03	0.00	115	115	< 0.005	< 0.005	0.00	115
Total	48.1	46.4	18.5	163	0.49	0.62	7,800	7,800	0.59	783	784	912	51,555	52,466	92.7	2.31	311	55,783
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.83	1.65	2.59	22.1	0.08	0.05	1,423	1,423	0.04	143	143	—	7,824	7,824	0.14	0.33	1.01	7,927
Area	6.83	6.73	0.06	6.89	< 0.005	0.01	—	0.01	0.01	—	0.01	—	25.7	25.7	< 0.005	< 0.005	—	25.8
Energy	0.07	0.03	0.62	0.52	< 0.005	0.05	—	0.05	0.05	—	0.05	—	667	667	0.06	< 0.005	—	669
Water	—	—	—	—	—	—	—	—	—	—	—	21.1	0.00	21.1	2.17	0.05	—	90.7
Waste	—	—	—	—	—	—	—	—	—	—	—	130	0.00	130	13.0	0.00	—	454
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	50.5	50.5
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	0.05	0.04	0.11	0.10	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	19.0	19.0	< 0.005	< 0.005	0.00	19.1
Total	8.78	8.46	3.37	29.7	0.09	0.11	1,423	1,424	0.11	143	143	151	8,535	8,686	15.3	0.38	51.6	9,236

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Industrial	12.5	11.4	14.9	181	0.57	0.30	9,037	9,037	0.28	907	908	—	58,094	58,094	0.99	2.22	16.2	58,797
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	12.5	11.4	14.9	181	0.57	0.30	9,037	9,037	0.28	907	908	—	58,094	58,094	0.99	2.22	16.2	58,797
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	11.1	9.93	16.7	116	0.50	0.30	9,037	9,037	0.28	907	908	—	51,210	51,210	1.00	2.31	0.42	51,923
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	11.1	9.93	16.7	116	0.50	0.30	9,037	9,037	0.28	907	908	—	51,210	51,210	1.00	2.31	0.42	51,923
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	1.83	1.65	2.59	22.1	0.08	0.05	1,423	1,423	0.04	143	143	—	7,824	7,824	0.14	0.33	1.01	7,927
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	1.83	1.65	2.59	22.1	0.08	0.05	1,423	1,423	0.04	143	143	—	7,824	7,824	0.14	0.33	1.01	7,927

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
undefined	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
undefined	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
undefined	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Industrial	0.37	0.19	3.38	2.84	0.02	0.26	—	0.26	0.26	—	0.26	—	4,028	4,028	0.36	0.01	—	4,039
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.37	0.19	3.38	2.84	0.02	0.26	—	0.26	0.26	—	0.26	—	4,028	4,028	0.36	0.01	—	4,039
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	0.37	0.19	3.38	2.84	0.02	0.26	—	0.26	0.26	—	0.26	—	4,028	4,028	0.36	0.01	—	4,039
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.37	0.19	3.38	2.84	0.02	0.26	—	0.26	0.26	—	0.26	—	4,028	4,028	0.36	0.01	—	4,039
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	0.07	0.03	0.62	0.52	< 0.005	0.05	—	0.05	0.05	—	0.05	—	667	667	0.06	< 0.005	—	669
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.07	0.03	0.62	0.52	< 0.005	0.05	—	0.05	0.05	—	0.05	—	667	667	0.06	< 0.005	—	669

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	25.6	25.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architect Coatings	5.14	5.14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landsca pe Equipm ent	9.08	8.38	0.43	51.0	< 0.005	0.09	—	0.09	0.07	—	0.07	—	210	210	0.01	< 0.005	—	211
Total	39.8	39.1	0.43	51.0	< 0.005	0.09	—	0.09	0.07	—	0.07	—	210	210	0.01	< 0.005	—	211
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consum er Product s	25.6	25.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architect ural Coating s	5.14	5.14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	30.7	30.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consum er Product s	4.66	4.66	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architect ural Coating s	0.94	0.94	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landsca pe Equipm ent	1.23	1.13	0.06	6.89	< 0.005	0.01	—	0.01	0.01	—	0.01	—	25.7	25.7	< 0.005	< 0.005	—	25.8
Total	6.83	6.73	0.06	6.89	< 0.005	0.01	—	0.01	0.01	—	0.01	—	25.7	25.7	< 0.005	< 0.005	—	25.8

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	128	0.00	128	13.1	0.31	—	548
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	128	0.00	128	13.1	0.31	—	548
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	128	0.00	128	13.1	0.31	—	548
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	128	0.00	128	13.1	0.31	—	548
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	21.1	0.00	21.1	2.17	0.05	—	90.7
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	21.1	0.00	21.1	2.17	0.05	—	90.7

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	784	0.00	784	78.3	0.00	—	2,742
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	784	0.00	784	78.3	0.00	—	2,742
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	784	0.00	784	78.3	0.00	—	2,742
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	784	0.00	784	78.3	0.00	—	2,742
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	130	0.00	130	13.0	0.00	—	454
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	130	0.00	130	13.0	0.00	—	454

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	305	305
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	305	305
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	305	305
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	305	305
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	50.5	50.5
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	50.5	50.5

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	1.80	1.64	4.59	4.18	0.01	0.24	0.00	0.24	0.24	0.00	0.24	0.00	840	840	0.03	0.01	0.00	842
Total	1.80	1.64	4.59	4.18	0.01	0.24	0.00	0.24	0.24	0.00	0.24	0.00	840	840	0.03	0.01	0.00	842
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	1.80	1.64	4.59	4.18	0.01	0.24	0.00	0.24	0.24	0.00	0.24	0.00	840	840	0.03	0.01	0.00	842
Total	1.80	1.64	4.59	4.18	0.01	0.24	0.00	0.24	0.24	0.00	0.24	0.00	840	840	0.03	0.01	0.00	842
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Emergency	0.05	0.04	0.11	0.10	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	19.0	19.0	< 0.005	< 0.005	0.00	19.1
Total	0.05	0.04	0.11	0.10	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	19.0	19.0	< 0.005	< 0.005	0.00	19.1

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Industrial Park	3,952	2,979	1,454	1,261,614	80,506	60,678	29,622	25,697,500
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	1,759,235	586,412	351,847

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	270

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Industrial Park	44,605,346	0.00	0.0000	0.0000	12,568,460

Parking Lot	5,136,964	0.00	0.0000	0.0000	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Industrial Park	66,657,928	2,950,228
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Industrial Park	1,454	—
Parking Lot	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Industrial Park	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Forklifts	Electric	Average	141	8.00	200	0.20

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
Emergency Generator	Diesel	2.00	1.00	50.0	500	0.73

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	32.8	annual days of extreme heat
Extreme Precipitation	0.00	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.19	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A

Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	11.6
AQ-PM	19.1
AQ-DPM	9.09
Drinking Water	30.6
Lead Risk Housing	50.8
Pesticides	90.5
Toxic Releases	7.58
Traffic	3.06
Effect Indicators	—
CleanUp Sites	74.2
Groundwater	77.9
Haz Waste Facilities/Generators	93.2
Impaired Water Bodies	100.0
Solid Waste	86.5
Sensitive Population	—
Asthma	87.6
Cardio-vascular	83.2
Low Birth Weights	26.9
Socioeconomic Factor Indicators	—
Education	82.7
Housing	51.4
Linguistic	88.8
Poverty	94.9
Unemployment	99.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	16.66880534
Employed	7.173104068
Median HI	5.299627871
Education	—
Bachelor's or higher	5.017323239
High school enrollment	16.8741178
Preschool enrollment	68.89516233
Transportation	—
Auto Access	18.40112922
Active commuting	51.10997049
Social	—
2-parent households	13.28114975
Voting	16.79712563
Neighborhood	—
Alcohol availability	70.25535737
Park access	33.85089183
Retail density	4.311561658
Supermarket access	49.58295907
Tree canopy	0.782753753
Housing	—
Homeownership	38.3036058
Housing habitability	30.96368536
Low-inc homeowner severe housing cost burden	26.76761196
Low-inc renter severe housing cost burden	52.89362248
Uncrowded housing	38.58591043
Health Outcomes	—

Insured adults	21.00603105
Arthritis	0.0
Asthma ER Admissions	30.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	41.7
Cognitively Disabled	50.3
Physically Disabled	19.5
Heart Attack ER Admissions	46.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	54.3
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	14.1
Elderly	42.0

English Speaking	18.7
Foreign-born	65.3
Outdoor Workers	5.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	85.8
Traffic Density	4.9
Traffic Access	23.0
Other Indices	—
Hardship	92.9
Other Decision Support	—
2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	82.0
Healthy Places Index Score for Project Location (b)	11.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Land use data are based on applicant-provided buildout assumptions.
Operations: Vehicle Data	Trip rates are based on ITE Land Use Code 130.
Operations: Landscape Equipment	Assumed 270 summer days for desert region.
Operations: Off-Road Equipment	Assumed offroad equipment as part of project operations.
Operations: Road Dust	All roads used by future developments projects within the Specific Plan Area would be required to be paved. Per ICAPCD guidance a value of 85% paved is assumed in the modeling to account for the high levels of entrained dust generated from vehicle travel on paved roadways in the region.
Operations: Emergency Generators and Fire Pumps	Assumed 2 emergency generators operating 1 hour/day and 50 hours/year for maintenance and testing.
Operations: Water and Waste Water	Water data are based on applicant-provided calculations for the land use.
Characteristics: Utility Information	GHG intensity factors adjusted per RPS requirements.

Lithium Valley Operation - Phase 2 - Commercial Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Lithium Valley Operation - Phase 2 - Commercial
Operational Year	2045
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	4.80
Location	33.18829759139308, -115.6026869228474
County	Imperial
City	Unincorporated
Air District	Imperial County APCD
Air Basin	Salton Sea
TAZ	5600
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Regional Shopping Center	687	1000sqft	686	686,506	343,253	—	—	—
Parking Lot	3,433	1000sqft	78.8	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	224	211	178	1,867	5.32	2.95	82,863	82,866	2.79	8,321	8,323	530	542,363	542,893	65.6	23.5	151	551,695
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	192	180	196	1,263	4.69	2.90	82,863	82,866	2.75	8,321	8,323	530	479,245	479,775	66.3	24.3	7.14	488,668
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	163	153	143	1,098	3.63	2.19	59,731	59,733	2.07	5,998	6,000	530	370,333	370,863	62.8	17.8	50.0	377,795
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	29.7	28.0	26.2	200	0.66	0.40	10,901	10,901	0.38	1,095	1,095	87.8	61,313	61,401	10.4	2.95	8.28	62,548

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	201	188	176	1,836	5.31	2.81	82,863	82,866	2.65	8,321	8,323	—	540,763	540,763	12.1	23.2	148	548,120

Area	23.3	22.9	0.25	29.9	< 0.005	0.05	—	0.05	0.04	—	0.04	—	123	123	0.01	< 0.005	—	123
Energy	0.14	0.07	1.24	1.04	0.01	0.09	—	0.09	0.09	—	0.09	—	1,477	1,477	0.13	< 0.005	—	1,481
Water	—	—	—	—	—	—	—	—	—	—	—	142	0.00	142	14.5	0.35	—	608
Waste	—	—	—	—	—	—	—	—	—	—	—	388	0.00	388	38.8	0.00	—	1,359
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.30	3.30
Total	224	211	178	1,867	5.32	2.95	82,863	82,866	2.79	8,321	8,323	530	542,363	542,893	65.6	23.5	151	551,695
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	174	162	195	1,262	4.68	2.81	82,863	82,866	2.66	8,321	8,323	—	477,768	477,768	12.8	23.9	3.84	485,216
Area	18.0	18.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.14	0.07	1.24	1.04	0.01	0.09	—	0.09	0.09	—	0.09	—	1,477	1,477	0.13	< 0.005	—	1,481
Water	—	—	—	—	—	—	—	—	—	—	—	142	0.00	142	14.5	0.35	—	608
Waste	—	—	—	—	—	—	—	—	—	—	—	388	0.00	388	38.8	0.00	—	1,359
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.30	3.30
Total	192	180	196	1,263	4.69	2.90	82,863	82,866	2.75	8,321	8,323	530	479,245	479,775	66.3	24.3	7.14	488,668
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	141	132	142	1,075	3.62	2.06	59,731	59,733	1.95	5,998	6,000	—	368,765	368,765	9.28	17.5	46.7	374,252
Area	21.9	21.6	0.19	22.1	< 0.005	0.04	—	0.04	0.03	—	0.03	—	90.8	90.8	< 0.005	< 0.005	—	91.2
Energy	0.14	0.07	1.24	1.04	0.01	0.09	—	0.09	0.09	—	0.09	—	1,477	1,477	0.13	< 0.005	—	1,481
Water	—	—	—	—	—	—	—	—	—	—	—	142	0.00	142	14.5	0.35	—	608
Waste	—	—	—	—	—	—	—	—	—	—	—	388	0.00	388	38.8	0.00	—	1,359
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.30	3.30
Total	163	153	143	1,098	3.63	2.19	59,731	59,733	2.07	5,998	6,000	530	370,333	370,863	62.8	17.8	50.0	377,795
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	25.7	24.0	25.9	196	0.66	0.38	10,901	10,901	0.36	1,095	1,095	—	61,053	61,053	1.54	2.89	7.74	61,962
Area	4.00	3.94	0.03	4.03	< 0.005	0.01	—	0.01	0.01	—	0.01	—	15.0	15.0	< 0.005	< 0.005	—	15.1
Energy	0.02	0.01	0.23	0.19	< 0.005	0.02	—	0.02	0.02	—	0.02	—	245	245	0.02	< 0.005	—	245

Water	—	—	—	—	—	—	—	—	—	—	—	23.5	0.00	23.5	2.41	0.06	—	101
Waste	—	—	—	—	—	—	—	—	—	—	—	64.3	0.00	64.3	6.43	0.00	—	225
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.55	0.55
Total	29.7	28.0	26.2	200	0.66	0.40	10,901	10,901	0.38	1,095	1,095	87.8	61,313	61,401	10.4	2.95	8.28	62,548

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	201	188	176	1,836	5.31	2.81	82,863	82,866	2.65	8,321	8,323	—	540,763	540,763	12.1	23.2	148	548,120
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	201	188	176	1,836	5.31	2.81	82,863	82,866	2.65	8,321	8,323	—	540,763	540,763	12.1	23.2	148	548,120
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	174	162	195	1,262	4.68	2.81	82,863	82,866	2.66	8,321	8,323	—	477,768	477,768	12.8	23.9	3.84	485,216
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Total	174	162	195	1,262	4.68	2.81	82,863	82,866	2.66	8,321	8,323	—	477,768	477,768	12.8	23.9	3.84	485,216
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	25.7	24.0	25.9	196	0.66	0.38	10,901	10,901	0.36	1,095	1,095	—	61,053	61,053	1.54	2.89	7.74	61,962
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	25.7	24.0	25.9	196	0.66	0.38	10,901	10,901	0.36	1,095	1,095	—	61,053	61,053	1.54	2.89	7.74	61,962

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	0.14	0.07	1.24	1.04	0.01	0.09	—	0.09	0.09	—	0.09	—	1,477	1,477	0.13	< 0.005	—	1,481
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.14	0.07	1.24	1.04	0.01	0.09	—	0.09	0.09	—	0.09	—	1,477	1,477	0.13	< 0.005	—	1,481
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Regiona Shopping Center	0.14	0.07	1.24	1.04	0.01	0.09	—	0.09	0.09	—	0.09	—	1,477	1,477	0.13	< 0.005	—	1,481
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.14	0.07	1.24	1.04	0.01	0.09	—	0.09	0.09	—	0.09	—	1,477	1,477	0.13	< 0.005	—	1,481
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	0.02	0.01	0.23	0.19	< 0.005	0.02	—	0.02	0.02	—	0.02	—	245	245	0.02	< 0.005	—	245
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.02	0.01	0.23	0.19	< 0.005	0.02	—	0.02	0.02	—	0.02	—	245	245	0.02	< 0.005	—	245

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	15.0	15.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	3.01	3.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Landscape Equipment	5.32	4.91	0.25	29.9	< 0.005	0.05	—	0.05	0.04	—	0.04	—	123	123	0.01	< 0.005	—	123
Total	23.3	22.9	0.25	29.9	< 0.005	0.05	—	0.05	0.04	—	0.04	—	123	123	0.01	< 0.005	—	123
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	15.0	15.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	3.01	3.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	18.0	18.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	2.73	2.73	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.55	0.55	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.72	0.66	0.03	4.03	< 0.005	0.01	—	0.01	0.01	—	0.01	—	15.0	15.0	< 0.005	< 0.005	—	15.1
Total	4.00	3.94	0.03	4.03	< 0.005	0.01	—	0.01	0.01	—	0.01	—	15.0	15.0	< 0.005	< 0.005	—	15.1

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	142	0.00	142	14.5	0.35	—	608
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	142	0.00	142	14.5	0.35	—	608
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	142	0.00	142	14.5	0.35	—	608
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	142	0.00	142	14.5	0.35	—	608
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	23.5	0.00	23.5	2.41	0.06	—	101
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	23.5	0.00	23.5	2.41	0.06	—	101

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	388	0.00	388	38.8	0.00	—	1,359
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	388	0.00	388	38.8	0.00	—	1,359
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	388	0.00	388	38.8	0.00	—	1,359
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	388	0.00	388	38.8	0.00	—	1,359
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	64.3	0.00	64.3	6.43	0.00	—	225
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	64.3	0.00	64.3	6.43	0.00	—	225

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.30	3.30
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.30	3.30
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.30	3.30
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.30	3.30
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.55	0.55
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.55	0.55

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Regional Shopping Center	64,868	79,250	36,254	22,934,743	539,664	738,181	337,693	196,797,360
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	1,029,759	343,253	205,950

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	270

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Regional Shopping Center	10,149,346	0.00	0.0000	0.0000	4,608,355
Parking Lot	3,006,870	0.00	0.0000	0.0000	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Regional Shopping Center	73,962,868	10,219,734
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Regional Shopping Center	721	—
Parking Lot	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Regional Shopping Center	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Regional Shopping Center	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	32.8	annual days of extreme heat
Extreme Precipitation	0.00	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.19	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	11.6

AQ-PM	19.1
AQ-DPM	9.09
Drinking Water	30.6
Lead Risk Housing	50.8
Pesticides	90.5
Toxic Releases	7.58
Traffic	3.06
Effect Indicators	—
CleanUp Sites	74.2
Groundwater	77.9
Haz Waste Facilities/Generators	93.2
Impaired Water Bodies	100.0
Solid Waste	86.5
Sensitive Population	—
Asthma	87.6
Cardio-vascular	83.2
Low Birth Weights	26.9
Socioeconomic Factor Indicators	—
Education	82.7
Housing	51.4
Linguistic	88.8
Poverty	94.9
Unemployment	99.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—

Above Poverty	16.66880534
Employed	7.173104068
Median HI	5.299627871
Education	—
Bachelor's or higher	5.017323239
High school enrollment	16.8741178
Preschool enrollment	68.89516233
Transportation	—
Auto Access	18.40112922
Active commuting	51.10997049
Social	—
2-parent households	13.28114975
Voting	16.79712563
Neighborhood	—
Alcohol availability	70.25535737
Park access	33.85089183
Retail density	4.311561658
Supermarket access	49.58295907
Tree canopy	0.782753753
Housing	—
Homeownership	38.3036058
Housing habitability	30.96368536
Low-inc homeowner severe housing cost burden	26.76761196
Low-inc renter severe housing cost burden	52.89362248
Uncrowded housing	38.58591043
Health Outcomes	—
Insured adults	21.00603105
Arthritis	0.0

Asthma ER Admissions	30.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	41.7
Cognitively Disabled	50.3
Physically Disabled	19.5
Heart Attack ER Admissions	46.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	54.3
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	14.1
Elderly	42.0
English Speaking	18.7
Foreign-born	65.3

Outdoor Workers	5.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	85.8
Traffic Density	4.9
Traffic Access	23.0
Other Indices	—
Hardship	92.9
Other Decision Support	—
2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	82.0
Healthy Places Index Score for Project Location (b)	11.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Land use data are based on applicant-provided buildout assumptions.
Operations: Landscape Equipment	Assumed 270 summer days for desert region.
Operations: Water and Waste Water	Water calculation based on applicant-provided figures.
Operations: Vehicle Data	Trip rates changed based on suggested ITE trip rates.
Operations: Road Dust	All roads used by future developments projects within the Specific Plan Area would be required to be paved. Per ICAPCD guidance a value of 85% paved is assumed in the modeling to account for the high levels of entrained dust generated from vehicle travel on paved roadways in the region.
Characteristics: Utility Information	GHG intensity factors adjusted per RPS requirements.

Lithium Valley Operation - Phase 2 - Data Centers Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Lithium Valley Operation - Phase 2 - Data Centers
Operational Year	2045
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	4.80
Location	33.18829759139308, -115.6026869228474
County	Imperial
City	Unincorporated
Air District	Imperial County APCD
Air Basin	Salton Sea
TAZ	5600
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
General Heavy Industry	2,685	1000sqft	1,114	2,684,546	1,342,273	—	—	—
Parking Lot	13,423	1000sqft	308	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1,396	1,277	5,272	3,312	6.28	173	9,944	10,117	173	998	1,172	3,160	665,494	668,655	345	10.5	717	681,113
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1,373	1,256	5,273	3,124	6.20	173	9,944	10,117	173	998	1,172	3,160	657,440	660,600	345	10.6	699	673,068
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	271	253	733	602	1.18	24.1	6,793	6,817	24.0	682	706	3,160	123,856	127,017	323	5.71	704	137,510
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	49.5	46.2	134	110	0.22	4.39	1,240	1,244	4.38	124	129	523	20,506	21,029	53.6	0.95	117	22,766

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	13.8	12.5	16.4	199	0.63	0.33	9,944	9,944	0.31	998	999	—	63,922	63,922	1.09	2.45	17.8	64,696

Area	91.1	89.5	0.98	117	0.01	0.21	—	0.21	0.16	—	0.16	—	480	480	0.02	< 0.005	—	482
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	1,366	0.00	1,366	140	3.33	—	5,861
Waste	—	—	—	—	—	—	—	—	—	—	—	1,794	0.00	1,794	179	0.00	—	6,277
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	699	699
Stationary	1,291	1,175	5,255	2,996	5.65	173	0.00	173	173	0.00	173	0.00	601,092	601,092	24.1	4.71	0.00	603,099
Total	1,396	1,277	5,272	3,312	6.28	173	9,944	10,117	173	998	1,172	3,160	665,494	668,655	345	10.5	717	681,113
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	12.2	10.9	18.4	128	0.55	0.33	9,944	9,944	0.31	998	999	—	56,347	56,347	1.10	2.54	0.46	57,133
Area	70.3	70.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	1,366	0.00	1,366	140	3.33	—	5,861
Waste	—	—	—	—	—	—	—	—	—	—	—	1,794	0.00	1,794	179	0.00	—	6,277
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	699	699
Stationary	1,291	1,175	5,255	2,996	5.65	173	0.00	173	173	0.00	173	0.00	601,092	601,092	24.1	4.71	0.00	603,099
Total	1,373	1,256	5,273	3,124	6.20	173	9,944	10,117	173	998	1,172	3,160	657,440	660,600	345	10.6	699	673,068
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	8.75	7.88	12.3	106	0.40	0.23	6,793	6,794	0.21	682	682	—	41,160	41,160	0.75	1.73	5.31	41,700
Area	85.7	84.5	0.73	86.4	0.01	0.15	—	0.15	0.12	—	0.12	—	355	355	0.01	< 0.005	—	356
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	1,366	0.00	1,366	140	3.33	—	5,861
Waste	—	—	—	—	—	—	—	—	—	—	—	1,794	0.00	1,794	179	0.00	—	6,277
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	699	699
Stationary	177	161	720	410	0.77	23.7	0.00	23.7	23.7	0.00	23.7	0.00	82,341	82,341	3.31	0.65	0.00	82,616
Total	271	253	733	602	1.18	24.1	6,793	6,817	24.0	682	706	3,160	123,856	127,017	323	5.71	704	137,510

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.60	1.44	2.25	19.3	0.07	0.04	1,240	1,240	0.04	124	125	—	6,814	6,814	0.12	0.29	0.88	6,904
Area	15.6	15.4	0.13	15.8	< 0.005	0.03	—	0.03	0.02	—	0.02	—	58.8	58.8	< 0.005	< 0.005	—	59.0
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	226	0.00	226	23.2	0.55	—	970
Waste	—	—	—	—	—	—	—	—	—	—	—	297	0.00	297	29.7	0.00	—	1,039
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	116	116
Stationary	32.3	29.4	131	74.9	0.14	4.32	0.00	4.32	4.32	0.00	4.32	0.00	13,633	13,633	0.55	0.11	0.00	13,678
Total	49.5	46.2	134	110	0.22	4.39	1,240	1,244	4.38	124	129	523	20,506	21,029	53.6	0.95	117	22,766

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	13.8	12.5	16.4	199	0.63	0.33	9,944	9,944	0.31	998	999	—	63,922	63,922	1.09	2.45	17.8	64,696
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	13.8	12.5	16.4	199	0.63	0.33	9,944	9,944	0.31	998	999	—	63,922	63,922	1.09	2.45	17.8	64,696
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	12.2	10.9	18.4	128	0.55	0.33	9,944	9,944	0.31	998	999	—	56,347	56,347	1.10	2.54	0.46	57,133
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	12.2	10.9	18.4	128	0.55	0.33	9,944	9,944	0.31	998	999	—	56,347	56,347	1.10	2.54	0.46	57,133
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	1.60	1.44	2.25	19.3	0.07	0.04	1,240	1,240	0.04	124	125	—	6,814	6,814	0.12	0.29	0.88	6,904
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	1.60	1.44	2.25	19.3	0.07	0.04	1,240	1,240	0.04	124	125	—	6,814	6,814	0.12	0.29	0.88	6,904

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	58.5	58.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	11.8	11.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	20.8	19.2	0.98	117	0.01	0.21	—	0.21	0.16	—	0.16	—	480	480	0.02	< 0.005	—	482
Total	91.1	89.5	0.98	117	0.01	0.21	—	0.21	0.16	—	0.16	—	480	480	0.02	< 0.005	—	482
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Consum Products	58.5	58.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	11.8	11.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	70.3	70.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	10.7	10.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	2.15	2.15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	2.81	2.59	0.13	15.8	< 0.005	0.03	—	0.03	0.02	—	0.02	—	58.8	58.8	< 0.005	< 0.005	—	59.0
Total	15.6	15.4	0.13	15.8	< 0.005	0.03	—	0.03	0.02	—	0.02	—	58.8	58.8	< 0.005	< 0.005	—	59.0

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	1,366	0.00	1,366	140	3.33	—	5,861

Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1,366	0.00	1,366	140	3.33	—	5,861
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	1,366	0.00	1,366	140	3.33	—	5,861
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1,366	0.00	1,366	140	3.33	—	5,861
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	226	0.00	226	23.2	0.55	—	970
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	226	0.00	226	23.2	0.55	—	970

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	1,794	0.00	1,794	179	0.00	—	6,277
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Total	—	—	—	—	—	—	—	—	—	—	—	1,794	0.00	1,794	179	0.00	—	6,277
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	1,794	0.00	1,794	179	0.00	—	6,277
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1,794	0.00	1,794	179	0.00	—	6,277
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	297	0.00	297	29.7	0.00	—	1,039
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	297	0.00	297	29.7	0.00	—	1,039

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	699	699
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	699	699
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	699	699
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	699	699
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	116	116
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	116	116

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipm Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	1,291	1,175	5,255	2,996	5.65	173	0.00	173	173	0.00	173	0.00	601,092	601,092	24.1	4.71	0.00	603,099
Total	1,291	1,175	5,255	2,996	5.65	173	0.00	173	173	0.00	173	0.00	601,092	601,092	24.1	4.71	0.00	603,099
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	1,291	1,175	5,255	2,996	5.65	173	0.00	173	173	0.00	173	0.00	601,092	601,092	24.1	4.71	0.00	603,099
Total	1,291	1,175	5,255	2,996	5.65	173	0.00	173	173	0.00	173	0.00	601,092	601,092	24.1	4.71	0.00	603,099
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	32.3	29.4	131	74.9	0.14	4.32	0.00	4.32	4.32	0.00	4.32	0.00	13,633	13,633	0.55	0.11	0.00	13,678
Total	32.3	29.4	131	74.9	0.14	4.32	0.00	4.32	4.32	0.00	4.32	0.00	13,633	13,633	0.55	0.11	0.00	13,678

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Remove	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
General Heavy Industry	2,658	4,349	3,436	1,098,842	54,134	88,583	69,991	22,382,041
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	4,026,819	1,342,273	805,364

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	270

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
General Heavy Industry	4,703,324,955	0.00	0.0000	0.0000	0.00
Parking Lot	11,758,312	0.00	0.0000	0.0000	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
General Heavy Industry	713,055,578	31,559,287
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
General Heavy Industry	3,329	—
Parking Lot	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
General Heavy Industry	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
Emergency Generator	Diesel	179	1.00	50.0	4,000	0.73

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	32.8	annual days of extreme heat
Extreme Precipitation	0.00	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.19	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A

Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	11.6
AQ-PM	19.1
AQ-DPM	9.09
Drinking Water	30.6
Lead Risk Housing	50.8
Pesticides	90.5
Toxic Releases	7.58
Traffic	3.06
Effect Indicators	—
CleanUp Sites	74.2
Groundwater	77.9

Haz Waste Facilities/Generators	93.2
Impaired Water Bodies	100.0
Solid Waste	86.5
Sensitive Population	—
Asthma	87.6
Cardio-vascular	83.2
Low Birth Weights	26.9
Socioeconomic Factor Indicators	—
Education	82.7
Housing	51.4
Linguistic	88.8
Poverty	94.9
Unemployment	99.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	16.66880534
Employed	7.173104068
Median HI	5.299627871
Education	—
Bachelor's or higher	5.017323239
High school enrollment	16.8741178
Preschool enrollment	68.89516233
Transportation	—
Auto Access	18.40112922
Active commuting	51.10997049

Social	—
2-parent households	13.28114975
Voting	16.79712563
Neighborhood	—
Alcohol availability	70.25535737
Park access	33.85089183
Retail density	4.311561658
Supermarket access	49.58295907
Tree canopy	0.782753753
Housing	—
Homeownership	38.3036058
Housing habitability	30.96368536
Low-inc homeowner severe housing cost burden	26.76761196
Low-inc renter severe housing cost burden	52.89362248
Uncrowded housing	38.58591043
Health Outcomes	—
Insured adults	21.00603105
Arthritis	0.0
Asthma ER Admissions	30.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	41.7
Cognitively Disabled	50.3
Physically Disabled	19.5

Heart Attack ER Admissions	46.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	54.3
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	14.1
Elderly	42.0
English Speaking	18.7
Foreign-born	65.3
Outdoor Workers	5.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	85.8
Traffic Density	4.9
Traffic Access	23.0
Other Indices	—
Hardship	92.9
Other Decision Support	—
2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	82.0
Healthy Places Index Score for Project Location (b)	11.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Land use data are based on applicant-provided buildout assumptions.
Operations: Vehicle Data	Trip rates based on ITE Land Use Code 160.
Operations: Landscape Equipment	Assumed 270 summer days for desert region.
Operations: Emergency Generators and Fire Pumps	Assumed 179 back-up generators each operating 1 hour/day and 50 hours/year for maintenance and testing.
Operations: Road Dust	All roads used by future developments projects within the Specific Plan Area would be required to be paved. Per ICAPCD guidance a value of 85% paved is assumed in the modeling to account for the high levels of entrained dust generated from vehicle travel on paved roadways in the region.
Operations: Water and Waste Water	Water data are based on applicant-provided calculations for the land use.

Operations: Energy Use	Electricity data are based on anticipated electricity demand of data center.
Characteristics: Utility Information	GHG intensity factors adjusted per RPS requirements.
Operations: Generators + Pumps EF	Compliance with Tier 4 Emission Standards for Generators

Lithium Valley Operation - Phase 2 - Emergency Services Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Lithium Valley Operation - Phase 2 - Emergency Services
Operational Year	2045
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	4.80
Location	33.18829759139308, -115.6026869228474
County	Imperial
City	Unincorporated
Air District	Imperial County APCD
Air Basin	Salton Sea
TAZ	5600
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
General Heavy Industry	500	1000sqft	337	500,208	100,042	—	—	—
Parking Lot	1,000	1000sqft	23.0	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	34.1	32.0	30.8	215	0.61	1.27	8,967	8,968	1.24	900	902	767	65,037	65,803	79.3	3.29	146	68,910
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	28.8	27.0	32.4	129	0.54	1.23	8,967	8,968	1.21	900	902	767	58,117	58,884	79.3	3.37	131	62,001
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	24.7	23.4	17.2	117	0.39	0.65	6,137	6,138	0.63	616	617	767	42,745	43,511	78.9	2.63	135	46,403
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.50	4.26	3.14	21.3	0.07	0.12	1,120	1,120	0.11	112	113	127	7,077	7,204	13.1	0.44	22.4	7,683

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	12.4	11.3	14.8	179	0.57	0.29	8,967	8,967	0.28	900	901	—	57,641	57,641	0.98	2.21	16.0	58,339

Area	16.7	16.4	0.18	21.8	< 0.005	0.04	—	0.04	0.03	—	0.03	—	89.5	89.5	< 0.005	< 0.005	—	89.8
Energy	0.48	0.24	4.36	3.67	0.03	0.33	—	0.33	0.33	—	0.33	—	5,208	5,208	0.46	0.01	—	5,222
Water	—	—	—	—	—	—	—	—	—	—	—	432	0.00	432	44.3	1.05	—	1,854
Waste	—	—	—	—	—	—	—	—	—	—	—	334	0.00	334	33.4	0.00	—	1,170
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	130	130
Stationary	4.51	4.10	11.5	10.5	0.02	0.60	0.00	0.60	0.60	0.00	0.60	0.00	2,099	2,099	0.08	0.02	0.00	2,106
Total	34.1	32.0	30.8	215	0.61	1.27	8,967	8,968	1.24	900	902	767	65,037	65,803	79.3	3.29	146	68,910
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	11.0	9.85	16.6	115	0.50	0.29	8,967	8,967	0.28	900	901	—	50,811	50,811	0.99	2.29	0.42	51,519
Area	12.8	12.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.48	0.24	4.36	3.67	0.03	0.33	—	0.33	0.33	—	0.33	—	5,208	5,208	0.46	0.01	—	5,222
Water	—	—	—	—	—	—	—	—	—	—	—	432	0.00	432	44.3	1.05	—	1,854
Waste	—	—	—	—	—	—	—	—	—	—	—	334	0.00	334	33.4	0.00	—	1,170
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	130	130
Stationary	4.51	4.10	11.5	10.5	0.02	0.60	0.00	0.60	0.60	0.00	0.60	0.00	2,099	2,099	0.08	0.02	0.00	2,106
Total	28.8	27.0	32.4	129	0.54	1.23	8,967	8,968	1.21	900	902	767	58,117	58,884	79.3	3.37	131	62,001
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	7.90	7.11	11.1	95.5	0.36	0.20	6,137	6,137	0.19	616	616	—	37,183	37,183	0.68	1.57	4.80	37,672
Area	15.7	15.4	0.14	16.1	< 0.005	0.03	—	0.03	0.02	—	0.02	—	66.2	66.2	< 0.005	< 0.005	—	66.4
Energy	0.48	0.24	4.36	3.67	0.03	0.33	—	0.33	0.33	—	0.33	—	5,208	5,208	0.46	0.01	—	5,222
Water	—	—	—	—	—	—	—	—	—	—	—	432	0.00	432	44.3	1.05	—	1,854
Waste	—	—	—	—	—	—	—	—	—	—	—	334	0.00	334	33.4	0.00	—	1,170
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	130	130
Stationary	0.62	0.56	1.57	1.43	< 0.005	0.08	0.00	0.08	0.08	0.00	0.08	0.00	288	288	0.01	< 0.005	0.00	288
Total	24.7	23.4	17.2	117	0.39	0.65	6,137	6,138	0.63	616	617	767	42,745	43,511	78.9	2.63	135	46,403

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.44	1.30	2.03	17.4	0.07	0.04	1,120	1,120	0.04	112	113	—	6,156	6,156	0.11	0.26	0.79	6,237
Area	2.86	2.82	0.02	2.94	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	11.0	11.0	< 0.005	< 0.005	—	11.0
Energy	0.09	0.04	0.80	0.67	< 0.005	0.06	—	0.06	0.06	—	0.06	—	862	862	0.08	< 0.005	—	865
Water	—	—	—	—	—	—	—	—	—	—	—	71.6	0.00	71.6	7.34	0.17	—	307
Waste	—	—	—	—	—	—	—	—	—	—	—	55.3	0.00	55.3	5.53	0.00	—	194
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	21.6	21.6
Stationary	0.11	0.10	0.29	0.26	< 0.005	0.02	0.00	0.02	0.02	0.00	0.02	0.00	47.6	47.6	< 0.005	< 0.005	0.00	47.8
Total	4.50	4.26	3.14	21.3	0.07	0.12	1,120	1,120	0.11	112	113	127	7,077	7,204	13.1	0.44	22.4	7,683

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	12.4	11.3	14.8	179	0.57	0.29	8,967	8,967	0.28	900	901	—	57,641	57,641	0.98	2.21	16.0	58,339
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	12.4	11.3	14.8	179	0.57	0.29	8,967	8,967	0.28	900	901	—	57,641	57,641	0.98	2.21	16.0	58,339
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	11.0	9.85	16.6	115	0.50	0.29	8,967	8,967	0.28	900	901	—	50,811	50,811	0.99	2.29	0.42	51,519
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	11.0	9.85	16.6	115	0.50	0.29	8,967	8,967	0.28	900	901	—	50,811	50,811	0.99	2.29	0.42	51,519
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	1.44	1.30	2.03	17.4	0.07	0.04	1,120	1,120	0.04	112	113	—	6,156	6,156	0.11	0.26	0.79	6,237
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	1.44	1.30	2.03	17.4	0.07	0.04	1,120	1,120	0.04	112	113	—	6,156	6,156	0.11	0.26	0.79	6,237

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.48	0.24	4.36	3.67	0.03	0.33	—	0.33	0.33	—	0.33	—	5,208	5,208	0.46	0.01	—	5,222
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.48	0.24	4.36	3.67	0.03	0.33	—	0.33	0.33	—	0.33	—	5,208	5,208	0.46	0.01	—	5,222
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.48	0.24	4.36	3.67	0.03	0.33	—	0.33	0.33	—	0.33	—	5,208	5,208	0.46	0.01	—	5,222

Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.48	0.24	4.36	3.67	0.03	0.33	—	0.33	0.33	—	0.33	—	5,208	5,208	0.46	0.01	—	5,222
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.09	0.04	0.80	0.67	< 0.005	0.06	—	0.06	0.06	—	0.06	—	862	862	0.08	< 0.005	—	865
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.09	0.04	0.80	0.67	< 0.005	0.06	—	0.06	0.06	—	0.06	—	862	862	0.08	< 0.005	—	865

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	10.8	10.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	2.02	2.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	3.87	3.58	0.18	21.8	< 0.005	0.04	—	0.04	0.03	—	0.03	—	89.5	89.5	< 0.005	< 0.005	—	89.8
Total	16.7	16.4	0.18	21.8	< 0.005	0.04	—	0.04	0.03	—	0.03	—	89.5	89.5	< 0.005	< 0.005	—	89.8
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Consum Products	10.8	10.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	2.02	2.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	12.8	12.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	1.97	1.97	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.37	0.37	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.52	0.48	0.02	2.94	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	11.0	11.0	< 0.005	< 0.005	—	11.0
Total	2.86	2.82	0.02	2.94	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	11.0	11.0	< 0.005	< 0.005	—	11.0

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	432	0.00	432	44.3	1.05	—	1,854

Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	432	0.00	432	44.3	1.05	—	1,854
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	432	0.00	432	44.3	1.05	—	1,854
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	432	0.00	432	44.3	1.05	—	1,854
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	71.6	0.00	71.6	7.34	0.17	—	307
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	71.6	0.00	71.6	7.34	0.17	—	307

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	334	0.00	334	33.4	0.00	—	1,170
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Total	—	—	—	—	—	—	—	—	—	—	—	334	0.00	334	33.4	0.00	—	1,170
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	334	0.00	334	33.4	0.00	—	1,170
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	334	0.00	334	33.4	0.00	—	1,170
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	55.3	0.00	55.3	5.53	0.00	—	194
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	55.3	0.00	55.3	5.53	0.00	—	194

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	130	130
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	130	130
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	130	130
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	130	130
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	21.6	21.6
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	21.6	21.6

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipm Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	4.51	4.10	11.5	10.5	0.02	0.60	0.00	0.60	0.60	0.00	0.60	0.00	2,099	2,099	0.08	0.02	0.00	2,106
Total	4.51	4.10	11.5	10.5	0.02	0.60	0.00	0.60	0.60	0.00	0.60	0.00	2,099	2,099	0.08	0.02	0.00	2,106
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	4.51	4.10	11.5	10.5	0.02	0.60	0.00	0.60	0.60	0.00	0.60	0.00	2,099	2,099	0.08	0.02	0.00	2,106
Total	4.51	4.10	11.5	10.5	0.02	0.60	0.00	0.60	0.60	0.00	0.60	0.00	2,099	2,099	0.08	0.02	0.00	2,106
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.11	0.10	0.29	0.26	< 0.005	0.02	0.00	0.02	0.02	0.00	0.02	0.00	47.6	47.6	< 0.005	< 0.005	0.00	47.8
Total	0.11	0.10	0.29	0.26	< 0.005	0.02	0.00	0.02	0.02	0.00	0.02	0.00	47.6	47.6	< 0.005	< 0.005	0.00	47.8

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Remove	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
General Heavy Industry	2,401	3,922	3,111	992,692	48,905	79,879	63,373	20,219,885
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	750,312	250,104	60,025

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	270

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
General Heavy Industry	15,193,531	0.00	0.0000	0.0000	16,249,058
Parking Lot	876,368	0.00	0.0000	0.0000	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
General Heavy Industry	225,566,346	3,993,372
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
General Heavy Industry	620	—
Parking Lot	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
General Heavy Industry	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
Emergency Generator	Diesel	5.00	1.00	50.0	500	0.73

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	32.8	annual days of extreme heat
Extreme Precipitation	0.00	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.19	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A

Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	11.6
AQ-PM	19.1
AQ-DPM	9.09
Drinking Water	30.6
Lead Risk Housing	50.8
Pesticides	90.5
Toxic Releases	7.58
Traffic	3.06
Effect Indicators	—
CleanUp Sites	74.2
Groundwater	77.9

Haz Waste Facilities/Generators	93.2
Impaired Water Bodies	100.0
Solid Waste	86.5
Sensitive Population	—
Asthma	87.6
Cardio-vascular	83.2
Low Birth Weights	26.9
Socioeconomic Factor Indicators	—
Education	82.7
Housing	51.4
Linguistic	88.8
Poverty	94.9
Unemployment	99.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	16.66880534
Employed	7.173104068
Median HI	5.299627871
Education	—
Bachelor's or higher	5.017323239
High school enrollment	16.8741178
Preschool enrollment	68.89516233
Transportation	—
Auto Access	18.40112922
Active commuting	51.10997049

Social	—
2-parent households	13.28114975
Voting	16.79712563
Neighborhood	—
Alcohol availability	70.25535737
Park access	33.85089183
Retail density	4.311561658
Supermarket access	49.58295907
Tree canopy	0.782753753
Housing	—
Homeownership	38.3036058
Housing habitability	30.96368536
Low-inc homeowner severe housing cost burden	26.76761196
Low-inc renter severe housing cost burden	52.89362248
Uncrowded housing	38.58591043
Health Outcomes	—
Insured adults	21.00603105
Arthritis	0.0
Asthma ER Admissions	30.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	41.7
Cognitively Disabled	50.3
Physically Disabled	19.5

Heart Attack ER Admissions	46.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	54.3
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	14.1
Elderly	42.0
English Speaking	18.7
Foreign-born	65.3
Outdoor Workers	5.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	85.8
Traffic Density	4.9
Traffic Access	23.0
Other Indices	—
Hardship	92.9
Other Decision Support	—
2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	82.0
Healthy Places Index Score for Project Location (b)	11.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Land use data are based on applicant-provided buildout assumptions.
Operations: Vehicle Data	Trip rates are based on ITE Land Use Code 575 PM rate.
Operations: Landscape Equipment	Assumed 270 summer days for desert region.
Operations: Road Dust	All roads used by future developments projects within the Specific Plan Area would be required to be paved. Per ICAPCD guidance a value of 85% paved is assumed in the modeling to account for the high levels of entrained dust generated from vehicle travel on paved roadways in the region.
Operations: Water and Waste Water	Water data are based on applicant-provided calculations for the land use.
Operations: Emergency Generators and Fire Pumps	Assumed 6 back-up generators operating 1 hour/day and 50 hours/year for maintenance and testing.

Characteristics: Utility Information	GHG intensity factors adjusted per RPS requirements.

Lithium Valley Operation - Phase 2 - EV Charging Stations Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Lithium Valley Operation - Phase 2 - EV Charging Stations
Operational Year	2045
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	4.80
Location	33.18829759139308, -115.6026869228474
County	Imperial
City	Unincorporated
Air District	Imperial County APCD
Air Basin	Salton Sea
TAZ	5600
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Parking Lot	5,857	1000sqft	135	0.00	1,171,358	—	—	—
Other Asphalt Surfaces	5,857	1000sqft	135	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.26	2.26	0.00	0.00	0.00	0.00	30,416	30,416	0.00	3,061	3,061	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.26	2.26	0.00	0.00	0.00	0.00	30,416	30,416	0.00	3,061	3,061	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.26	2.26	0.00	0.00	0.00	0.00	30,018	30,018	0.00	3,021	3,021	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.41	0.41	0.00	0.00	0.00	0.00	5,478	5,478	0.00	551	551	0.00	0.00	0.00	0.00	0.00	0.00	0.00

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	30,416	30,416	0.00	3,061	3,061	—	0.00	0.00	0.00	0.00	0.00	0.00

Area	2.26	2.26	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	2.26	2.26	0.00	0.00	0.00	0.00	30,416	30,416	0.00	3,061	3,061	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	30,416	30,416	0.00	3,061	3,061	—	0.00	0.00	0.00	0.00	0.00	0.00
Area	2.26	2.26	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	2.26	2.26	0.00	0.00	0.00	0.00	30,416	30,416	0.00	3,061	3,061	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	30,018	30,018	0.00	3,021	3,021	—	0.00	0.00	0.00	0.00	0.00	0.00
Area	2.26	2.26	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	2.26	2.26	0.00	0.00	0.00	0.00	30,018	30,018	0.00	3,021	3,021	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	5,478	5,478	0.00	551	551	—	0.00	0.00	0.00	0.00	0.00	0.00
Area	0.41	0.41	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	0.41	0.41	0.00	0.00	0.00	0.00	5,478	5,478	0.00	551	551	0.00	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	17,373	17,373	0.00	1,751	1,751	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	13,043	13,043	0.00	1,309	1,309	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	30,416	30,416	0.00	3,061	3,061	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	17,373	17,373	0.00	1,751	1,751	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	13,043	13,043	0.00	1,309	1,309	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	30,416	30,416	0.00	3,061	3,061	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	3,129	3,129	0.00	315	315	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	2,349	2,349	0.00	236	236	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	5,478	5,478	0.00	551	551	—	0.00	0.00	0.00	0.00	0.00	0.00

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.92	0.92	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	1.34	1.34	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	2.26	2.26	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.92	0.92	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	1.34	1.34	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	2.26	2.26	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.17	0.17	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.24	0.24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Landscape	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.41	0.41	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Parking Lot	7,585	7,585	7,585	2,768,453	154,493	154,493	154,493	56,389,932
Other Asphalt Surfaces	5,705	5,705	5,705	2,082,430	116,210	116,210	116,210	42,416,489

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	0.00	0.00	703,058

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	270

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Parking Lot	26,091,482	0.00	0.0000	0.0000	0.00
Other Asphalt Surfaces	0.00	0.00	0.0000	0.0000	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Parking Lot	0.00	15,358,899
Other Asphalt Surfaces	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)

Parking Lot	0.00	—
Other Asphalt Surfaces	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	32.8	annual days of extreme heat
Extreme Precipitation	0.00	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.19	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	11.6
AQ-PM	19.1
AQ-DPM	9.09
Drinking Water	30.6
Lead Risk Housing	50.8
Pesticides	90.5
Toxic Releases	7.58
Traffic	3.06
Effect Indicators	—
CleanUp Sites	74.2
Groundwater	77.9
Haz Waste Facilities/Generators	93.2
Impaired Water Bodies	100.0
Solid Waste	86.5
Sensitive Population	—
Asthma	87.6

Cardio-vascular	83.2
Low Birth Weights	26.9
Socioeconomic Factor Indicators	—
Education	82.7
Housing	51.4
Linguistic	88.8
Poverty	94.9
Unemployment	99.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	16.66880534
Employed	7.173104068
Median HI	5.299627871
Education	—
Bachelor's or higher	5.017323239
High school enrollment	16.8741178
Preschool enrollment	68.89516233
Transportation	—
Auto Access	18.40112922
Active commuting	51.10997049
Social	—
2-parent households	13.28114975
Voting	16.79712563
Neighborhood	—
Alcohol availability	70.25535737

Park access	33.85089183
Retail density	4.311561658
Supermarket access	49.58295907
Tree canopy	0.782753753
Housing	—
Homeownership	38.3036058
Housing habitability	30.96368536
Low-inc homeowner severe housing cost burden	26.76761196
Low-inc renter severe housing cost burden	52.89362248
Uncrowded housing	38.58591043
Health Outcomes	—
Insured adults	21.00603105
Arthritis	0.0
Asthma ER Admissions	30.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	41.7
Cognitively Disabled	50.3
Physically Disabled	19.5
Heart Attack ER Admissions	46.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	54.3

Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	14.1
Elderly	42.0
English Speaking	18.7
Foreign-born	65.3
Outdoor Workers	5.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	85.8
Traffic Density	4.9
Traffic Access	23.0
Other Indices	—
Hardship	92.9
Other Decision Support	—
2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	82.0
Healthy Places Index Score for Project Location (b)	11.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes

Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Operations: Landscape Equipment	Assumed 270 summer days for desert region.
Operations: Road Dust	All roads used by future developments projects within the Specific Plan Area would be required to be paved. Per ICAPCD guidance a value of 85% paved is assumed in the modeling to account for the high levels of entrained dust generated from vehicle travel on paved roadways in the region.
Operations: Fleet Mix	"Parking Lot" land use subtype encompasses EV truck trips, conservatively assumed to be 100% HHD vehicles. "Other Asphalt Surfaces" land use subtype encompasses passenger vehicle trips, conservatively assumed to be 50% LDA and 50% LDT1 vehicles.
Operations: Vehicle Data	Trip rates adjusted per EV charging station trip generation methodology.
Operations: Vehicle EF	EV vehicle trips only emit PM from tire and break wear and tear. All other emission factors assumed to be 0, for those applicable vehicle classes.
Operations: Energy Use	Electricity demand is based on example EV charging stations and scaled based on project size.
Land Use	All roads used by future developments projects within the Specific Plan Area would be required to be paved. Per ICAPCD guidance a value of 85% paved is assumed in the modeling to account for the high levels of entrained dust generated from vehicle travel on paved roadways in the region.
Operations: Water and Waste Water	Water data are based on applicant-provided calculations for the land use
Characteristics: Utility Information	GHG intensity factors adjusted per RPS requirements.

Lithium Valley Operation - Phase 2 - Green Hydrogen Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Lithium Valley Operation - Phase 2 - Green Hydrogen
Operational Year	2045
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	4.80
Location	33.18829759139308, -115.6026869228474
County	Imperial
City	Unincorporated
Air District	Imperial County APCD
Air Basin	Salton Sea
TAZ	5600
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
General Heavy Industry	1,589	1000sqft	896	1,588,552	317,710	—	—	—
Parking Lot	3,177	1000sqft	72.9	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	73.9	67.2	35.6	252	0.82	7.42	4,468	4,475	7.38	449	456	2,701	132,782	135,484	278	6.16	421	144,690
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	60.9	55.2	36.0	151	0.78	7.29	4,468	4,475	7.29	449	456	2,701	129,095	131,796	278	6.20	414	141,007
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	63.3	57.7	21.7	178	0.67	6.44	3,047	3,053	6.41	306	312	2,701	116,028	118,729	278	5.77	416	127,806
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	11.6	10.5	3.96	32.4	0.12	1.18	556	557	1.17	55.8	57.0	447	19,210	19,657	46.0	0.96	68.9	21,160

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	6.20	5.62	7.36	89.4	0.28	0.15	4,468	4,468	0.14	449	449	—	28,719	28,719	0.49	1.10	7.99	29,067

Area	53.0	52.0	0.58	69.1	< 0.005	0.12	—	0.12	0.09	—	0.09	—	284	284	0.01	< 0.005	—	285
Energy	1.52	0.76	13.9	11.6	0.08	1.05	—	1.05	1.05	—	1.05	—	16,538	16,538	1.46	0.03	—	16,584
Water	—	—	—	—	—	—	—	—	—	—	—	1,640	0.00	1,640	168	3.99	—	7,034
Waste	—	—	—	—	—	—	—	—	—	—	—	1,062	0.00	1,062	106	0.00	—	3,714
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	414	414
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	13.2	8.83	13.8	81.8	0.45	6.09	0.00	6.09	6.09	0.00	6.09	0.00	87,241	87,241	1.73	1.04	0.00	87,593
Total	73.9	67.2	35.6	252	0.82	7.42	4,468	4,475	7.38	449	456	2,701	132,782	135,484	278	6.16	421	144,690
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	5.47	4.91	8.28	57.4	0.25	0.15	4,468	4,468	0.14	449	449	—	25,316	25,316	0.50	1.14	0.21	25,669
Area	40.7	40.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	1.52	0.76	13.9	11.6	0.08	1.05	—	1.05	1.05	—	1.05	—	16,538	16,538	1.46	0.03	—	16,584
Water	—	—	—	—	—	—	—	—	—	—	—	1,640	0.00	1,640	168	3.99	—	7,034
Waste	—	—	—	—	—	—	—	—	—	—	—	1,062	0.00	1,062	106	0.00	—	3,714
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	414	414
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	13.2	8.83	13.8	81.8	0.45	6.09	0.00	6.09	6.09	0.00	6.09	0.00	87,241	87,241	1.73	1.04	0.00	87,593
Total	60.9	55.2	36.0	151	0.78	7.29	4,468	4,475	7.29	449	456	2,701	129,095	131,796	278	6.20	414	141,007
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	3.92	3.53	5.54	47.4	0.18	0.10	3,047	3,047	0.10	306	306	—	18,461	18,461	0.34	0.78	2.38	18,703
Area	49.8	49.1	0.43	51.1	< 0.005	0.09	—	0.09	0.07	—	0.07	—	210	210	0.01	< 0.005	—	211
Energy	1.52	0.76	13.9	11.6	0.08	1.05	—	1.05	1.05	—	1.05	—	16,538	16,538	1.46	0.03	—	16,584
Water	—	—	—	—	—	—	—	—	—	—	—	1,640	0.00	1,640	168	3.99	—	7,034
Waste	—	—	—	—	—	—	—	—	—	—	—	1,062	0.00	1,062	106	0.00	—	3,714

Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	414	414
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	8.12	4.37	1.90	67.4	0.41	5.20	0.00	5.20	5.20	0.00	5.20	0.00	80,819	80,819	1.56	0.97	0.00	81,146
Total	63.3	57.7	21.7	178	0.67	6.44	3,047	3,053	6.41	306	312	2,701	116,028	118,729	278	5.77	416	127,806
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.72	0.64	1.01	8.65	0.03	0.02	556	556	0.02	55.8	55.9	—	3,056	3,056	0.06	0.13	0.39	3,097
Area	9.08	8.95	0.08	9.33	< 0.005	0.02	—	0.02	0.01	—	0.01	—	34.8	34.8	< 0.005	< 0.005	—	34.9
Energy	0.28	0.14	2.53	2.12	0.02	0.19	—	0.19	0.19	—	0.19	—	2,738	2,738	0.24	0.01	—	2,746
Water	—	—	—	—	—	—	—	—	—	—	—	271	0.00	271	27.8	0.66	—	1,164
Waste	—	—	—	—	—	—	—	—	—	—	—	176	0.00	176	17.6	0.00	—	615
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	68.5	68.5
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	1.48	0.80	0.35	12.3	0.07	0.95	0.00	0.95	0.95	0.00	0.95	0.00	13,381	13,381	0.26	0.16	0.00	13,435
Total	11.6	10.5	3.96	32.4	0.12	1.18	556	557	1.17	55.8	57.0	447	19,210	19,657	46.0	0.96	68.9	21,160

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	6.20	5.62	7.36	89.4	0.28	0.15	4,468	4,468	0.14	449	449	—	28,719	28,719	0.49	1.10	7.99	29,067
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	6.20	5.62	7.36	89.4	0.28	0.15	4,468	4,468	0.14	449	449	—	28,719	28,719	0.49	1.10	7.99	29,067
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	5.47	4.91	8.28	57.4	0.25	0.15	4,468	4,468	0.14	449	449	—	25,316	25,316	0.50	1.14	0.21	25,669
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	5.47	4.91	8.28	57.4	0.25	0.15	4,468	4,468	0.14	449	449	—	25,316	25,316	0.50	1.14	0.21	25,669
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.72	0.64	1.01	8.65	0.03	0.02	556	556	0.02	55.8	55.9	—	3,056	3,056	0.06	0.13	0.39	3,097
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.72	0.64	1.01	8.65	0.03	0.02	556	556	0.02	55.8	55.9	—	3,056	3,056	0.06	0.13	0.39	3,097

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
undefined	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
undefined	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
undefined	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	1.52	0.76	13.9	11.6	0.08	1.05	—	1.05	1.05	—	1.05	—	16,538	16,538	1.46	0.03	—	16,584
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	1.52	0.76	13.9	11.6	0.08	1.05	—	1.05	1.05	—	1.05	—	16,538	16,538	1.46	0.03	—	16,584
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	1.52	0.76	13.9	11.6	0.08	1.05	—	1.05	1.05	—	1.05	—	16,538	16,538	1.46	0.03	—	16,584
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	1.52	0.76	13.9	11.6	0.08	1.05	—	1.05	1.05	—	1.05	—	16,538	16,538	1.46	0.03	—	16,584
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.28	0.14	2.53	2.12	0.02	0.19	—	0.19	0.19	—	0.19	—	2,738	2,738	0.24	0.01	—	2,746
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.28	0.14	2.53	2.12	0.02	0.19	—	0.19	0.19	—	0.19	—	2,738	2,738	0.24	0.01	—	2,746

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Consum Products	34.2	34.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	6.42	6.42	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	12.3	11.4	0.58	69.1	< 0.005	0.12	—	0.12	0.09	—	0.09	—	284	284	0.01	< 0.005	—	285
Total	53.0	52.0	0.58	69.1	< 0.005	0.12	—	0.12	0.09	—	0.09	—	284	284	0.01	< 0.005	—	285
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	34.2	34.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	6.42	6.42	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	40.7	40.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	6.25	6.25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	1.17	1.17	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	1.66	1.53	0.08	9.33	< 0.005	0.02	—	0.02	0.01	—	0.01	—	34.8	34.8	< 0.005	< 0.005	—	34.9
Total	9.08	8.95	0.08	9.33	< 0.005	0.02	—	0.02	0.01	—	0.01	—	34.8	34.8	< 0.005	< 0.005	—	34.9

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	1,640	0.00	1,640	168	3.99	—	7,034
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1,640	0.00	1,640	168	3.99	—	7,034
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	1,640	0.00	1,640	168	3.99	—	7,034
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1,640	0.00	1,640	168	3.99	—	7,034
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	271	0.00	271	27.8	0.66	—	1,164
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	271	0.00	271	27.8	0.66	—	1,164

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	1,062	0.00	1,062	106	0.00	—	3,714
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1,062	0.00	1,062	106	0.00	—	3,714
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	1,062	0.00	1,062	106	0.00	—	3,714
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1,062	0.00	1,062	106	0.00	—	3,714
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	176	0.00	176	17.6	0.00	—	615
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	176	0.00	176	17.6	0.00	—	615

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	414	414
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	414	414
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	414	414
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	414	414
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	68.5	68.5
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	68.5	68.5

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Aerial Lifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Skid Steer Loaders	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Aerial Lifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Skid Steer Loaders	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Aerial Lifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Skid Steer Loaders	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Emergency	3.63	3.30	9.23	8.42	0.02	0.49	0.00	0.49	0.49	0.00	0.49	0.00	1,690	1,690	0.07	0.01	0.00	1,696
Fire Pump	1.81	1.65	4.61	4.21	0.01	0.24	0.00	0.24	0.24	0.00	0.24	0.00	844	844	0.03	0.01	0.00	847
Process Boiler	7.76	3.88	0.00	69.2	0.42	5.36	0.00	5.36	5.36	0.00	5.36	0.00	84,707	84,707	1.62	1.02	0.00	85,051
Total	13.2	8.83	13.8	81.8	0.45	6.09	0.00	6.09	6.09	0.00	6.09	0.00	87,241	87,241	1.73	1.04	0.00	87,593
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	3.63	3.30	9.23	8.42	0.02	0.49	0.00	0.49	0.49	0.00	0.49	0.00	1,690	1,690	0.07	0.01	0.00	1,696
Fire Pump	1.81	1.65	4.61	4.21	0.01	0.24	0.00	0.24	0.24	0.00	0.24	0.00	844	844	0.03	0.01	0.00	847
Process Boiler	7.76	3.88	0.00	69.2	0.42	5.36	0.00	5.36	5.36	0.00	5.36	0.00	84,707	84,707	1.62	1.02	0.00	85,051
Total	13.2	8.83	13.8	81.8	0.45	6.09	0.00	6.09	6.09	0.00	6.09	0.00	87,241	87,241	1.73	1.04	0.00	87,593
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.09	0.08	0.23	0.21	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	38.3	38.3	< 0.005	< 0.005	0.00	38.5
Fire Pump	0.05	0.04	0.12	0.11	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	19.1	19.1	< 0.005	< 0.005	0.00	19.2
Process Boiler	1.35	0.67	0.00	12.0	0.07	0.93	0.00	0.93	0.93	0.00	0.93	0.00	13,323	13,323	0.26	0.16	0.00	13,377
Total	1.48	0.80	0.35	12.3	0.07	0.95	0.00	0.95	0.95	0.00	0.95	0.00	13,381	13,381	0.26	0.16	0.00	13,435

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipm Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
General Heavy Industry	1,191	1,954	1,541	492,848	24,268	39,799	31,386	10,038,703
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	2,382,828	794,276	190,626

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	270

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
General Heavy Industry	48,251,355	0.00	0.0000	0.0000	51,603,481
Parking Lot	2,783,143	0.00	0.0000	0.0000	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
General Heavy Industry	855,702,191	15,149,086
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
General Heavy Industry	1,970	—
Parking Lot	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
General Heavy Industry	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Aerial Lifts	Electric	Average	2.00	1.00	63.0	0.31
Skid Steer Loaders	Electric	Average	2.00	1.00	71.0	0.37

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
Emergency Generator	Diesel	3.00	1.00	50.0	671	0.73
Fire Pump	Diesel	3.00	1.00	50.0	335	0.73

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)
Boiler - CNG (5–75 MMBTU)	CNG	3.00	10.0	240	83,220

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	32.8	annual days of extreme heat
Extreme Precipitation	0.00	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.19	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	11.6
AQ-PM	19.1
AQ-DPM	9.09
Drinking Water	30.6

Lead Risk Housing	50.8
Pesticides	90.5
Toxic Releases	7.58
Traffic	3.06
Effect Indicators	—
CleanUp Sites	74.2
Groundwater	77.9
Haz Waste Facilities/Generators	93.2
Impaired Water Bodies	100.0
Solid Waste	86.5
Sensitive Population	—
Asthma	87.6
Cardio-vascular	83.2
Low Birth Weights	26.9
Socioeconomic Factor Indicators	—
Education	82.7
Housing	51.4
Linguistic	88.8
Poverty	94.9
Unemployment	99.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	16.66880534
Employed	7.173104068
Median HI	5.299627871

Education	—
Bachelor's or higher	5.017323239
High school enrollment	16.8741178
Preschool enrollment	68.89516233
Transportation	—
Auto Access	18.40112922
Active commuting	51.10997049
Social	—
2-parent households	13.28114975
Voting	16.79712563
Neighborhood	—
Alcohol availability	70.25535737
Park access	33.85089183
Retail density	4.311561658
Supermarket access	49.58295907
Tree canopy	0.782753753
Housing	—
Homeownership	38.3036058
Housing habitability	30.96368536
Low-inc homeowner severe housing cost burden	26.76761196
Low-inc renter severe housing cost burden	52.89362248
Uncrowded housing	38.58591043
Health Outcomes	—
Insured adults	21.00603105
Arthritis	0.0
Asthma ER Admissions	30.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0

Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	41.7
Cognitively Disabled	50.3
Physically Disabled	19.5
Heart Attack ER Admissions	46.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	54.3
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	14.1
Elderly	42.0
English Speaking	18.7
Foreign-born	65.3
Outdoor Workers	5.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	85.8

Traffic Density	4.9
Traffic Access	23.0
Other Indices	—
Hardship	92.9
Other Decision Support	—
2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	82.0
Healthy Places Index Score for Project Location (b)	11.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Land use data are based on applicant-provided buildout assumptions.
Operations: Vehicle Data	Custom trip rates are provided by the applicant.

Operations: Landscape Equipment	Assumed 270 summer days for desert region.
Operations: Off-Road Equipment	Assumed 2 aerial lifts and 2 skid steer loaders each operating 1 hour per day as part of project operations.
Operations: Emergency Generators and Fire Pumps	Assumed 4 back-up generators and 4 fire pumps operating 1 hour/day and 50 hours/year for maintenance and testing.
Operations: Road Dust	All roads used by future developments projects within the Specific Plan Area would be required to be paved. Per ICAPCD guidance a value of 85% paved is assumed in the modeling to account for the high levels of entrained dust generated from vehicle travel on paved roadways in the region.
Operations: Water and Waste Water	Water data are based on applicant-provided calculations for the land use.
Characteristics: Utility Information	GHG intensity factors adjusted per RPS requirements.

Lithium Valley Operation - Phase 2 - Housing Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Lithium Valley Operation - Phase 2 - Housing
Operational Year	2045
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	4.80
Location	33.18829759139308, -115.6026869228474
County	Imperial
City	Unincorporated
Air District	Imperial County APCD
Air Basin	Salton Sea
TAZ	5600
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Condo/Townhouse	278	Dwelling Unit	66.2	136,768	27,354	—	990	—
Parking Lot	274	1000sqft	6.28	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	11.1	10.4	8.03	91.1	0.24	0.25	3,629	3,629	0.24	364	365	141	25,320	25,461	14.8	1.00	7.47	26,138
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	8.86	8.31	8.65	49.5	0.21	0.24	3,629	3,629	0.23	364	365	141	22,515	22,656	14.8	1.04	1.15	23,336
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	9.57	9.00	7.79	64.0	0.20	0.23	3,206	3,207	0.22	322	322	141	21,397	21,538	14.8	0.92	3.49	22,186
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.75	1.64	1.42	11.7	0.04	0.04	585	585	0.04	58.8	58.8	23.4	3,542	3,566	2.44	0.15	0.58	3,673

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	5.99	5.50	6.42	74.6	0.23	0.12	3,629	3,629	0.11	364	365	—	23,420	23,420	0.43	0.92	6.49	23,713

Area	4.90	4.82	0.15	15.9	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	42.2	42.2	< 0.005	< 0.005	—	42.3
Energy	0.17	0.09	1.46	0.62	0.01	0.12	—	0.12	0.12	—	0.12	—	1,858	1,858	0.16	< 0.005	—	1,863
Water	—	—	—	—	—	—	—	—	—	—	—	30.6	0.00	30.6	3.14	0.07	—	131
Waste	—	—	—	—	—	—	—	—	—	—	—	111	0.00	111	11.1	0.00	—	388
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.98	0.98
Total	11.1	10.4	8.03	91.1	0.24	0.25	3,629	3,629	0.24	364	365	141	25,320	25,461	14.8	1.00	7.47	26,138
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	5.24	4.77	7.19	48.8	0.20	0.12	3,629	3,629	0.11	364	365	—	20,657	20,657	0.44	0.96	0.17	20,954
Area	3.45	3.45	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Energy	0.17	0.09	1.46	0.62	0.01	0.12	—	0.12	0.12	—	0.12	—	1,858	1,858	0.16	< 0.005	—	1,863
Water	—	—	—	—	—	—	—	—	—	—	—	30.6	0.00	30.6	3.14	0.07	—	131
Waste	—	—	—	—	—	—	—	—	—	—	—	111	0.00	111	11.1	0.00	—	388
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.98	0.98
Total	8.86	8.31	8.65	49.5	0.21	0.24	3,629	3,629	0.23	364	365	141	22,515	22,656	14.8	1.04	1.15	23,336
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	4.88	4.45	6.22	51.6	0.19	0.11	3,206	3,206	0.10	322	322	—	19,508	19,508	0.39	0.84	2.51	19,772
Area	4.52	4.46	0.11	11.7	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	0.00	31.2	31.2	< 0.005	< 0.005	—	31.3
Energy	0.17	0.09	1.46	0.62	0.01	0.12	—	0.12	0.12	—	0.12	—	1,858	1,858	0.16	< 0.005	—	1,863
Water	—	—	—	—	—	—	—	—	—	—	—	30.6	0.00	30.6	3.14	0.07	—	131
Waste	—	—	—	—	—	—	—	—	—	—	—	111	0.00	111	11.1	0.00	—	388
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.98	0.98
Total	9.57	9.00	7.79	64.0	0.20	0.23	3,206	3,207	0.22	322	322	141	21,397	21,538	14.8	0.92	3.49	22,186
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.89	0.81	1.13	9.42	0.03	0.02	585	585	0.02	58.8	58.8	—	3,230	3,230	0.06	0.14	0.42	3,273
Area	0.82	0.81	0.02	2.14	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	5.16	5.16	< 0.005	< 0.005	—	5.18
Energy	0.03	0.02	0.27	0.11	< 0.005	0.02	—	0.02	0.02	—	0.02	—	308	308	0.03	< 0.005	—	308

Water	—	—	—	—	—	—	—	—	—	—	—	5.06	0.00	5.06	0.52	0.01	—	21.7
Waste	—	—	—	—	—	—	—	—	—	—	—	18.3	0.00	18.3	1.83	0.00	—	64.2
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.16	0.16
Total	1.75	1.64	1.42	11.7	0.04	0.04	585	585	0.04	58.8	58.8	23.4	3,542	3,566	2.44	0.15	0.58	3,673

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	5.99	5.50	6.42	74.6	0.23	0.12	3,629	3,629	0.11	364	365	—	23,420	23,420	0.43	0.92	6.49	23,713
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	5.99	5.50	6.42	74.6	0.23	0.12	3,629	3,629	0.11	364	365	—	23,420	23,420	0.43	0.92	6.49	23,713
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	5.24	4.77	7.19	48.8	0.20	0.12	3,629	3,629	0.11	364	365	—	20,657	20,657	0.44	0.96	0.17	20,954
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	5.24	4.77	7.19	48.8	0.20	0.12	3,629	3,629	0.11	364	365	—	20,657	20,657	0.44	0.96	0.17	20,954
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Condo/T	0.89	0.81	1.13	9.42	0.03	0.02	585	585	0.02	58.8	58.8	—	3,230	3,230	0.06	0.14	0.42	3,273
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.89	0.81	1.13	9.42	0.03	0.02	585	585	0.02	58.8	58.8	—	3,230	3,230	0.06	0.14	0.42	3,273

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	0.17	0.09	1.46	0.62	0.01	0.12	—	0.12	0.12	—	0.12	—	1,858	1,858	0.16	< 0.005	—	1,863
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.17	0.09	1.46	0.62	0.01	0.12	—	0.12	0.12	—	0.12	—	1,858	1,858	0.16	< 0.005	—	1,863
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	0.17	0.09	1.46	0.62	0.01	0.12	—	0.12	0.12	—	0.12	—	1,858	1,858	0.16	< 0.005	—	1,863
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.17	0.09	1.46	0.62	0.01	0.12	—	0.12	0.12	—	0.12	—	1,858	1,858	0.16	< 0.005	—	1,863
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	0.03	0.02	0.27	0.11	< 0.005	0.02	—	0.02	0.02	—	0.02	—	308	308	0.03	< 0.005	—	308
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.03	0.02	0.27	0.11	< 0.005	0.02	—	0.02	0.02	—	0.02	—	308	308	0.03	< 0.005	—	308

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	2.95	2.95	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.50	0.50	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	1.45	1.37	0.15	15.9	< 0.005	0.01	—	0.01	0.01	—	0.01	—	42.2	42.2	< 0.005	< 0.005	—	42.3
Total	4.90	4.82	0.15	15.9	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	42.2	42.2	< 0.005	< 0.005	—	42.3
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	2.95	2.95	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.50	0.50	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	3.45	3.45	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	0.54	0.54	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.09	0.09	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.20	0.18	0.02	2.14	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.16	5.16	< 0.005	< 0.005	—	5.18
Total	0.82	0.81	0.02	2.14	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	5.16	5.16	< 0.005	< 0.005	—	5.18

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	30.6	0.00	30.6	3.14	0.07	—	131
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	30.6	0.00	30.6	3.14	0.07	—	131
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Condo/Townhou	—	—	—	—	—	—	—	—	—	—	—	30.6	0.00	30.6	3.14	0.07	—	131
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	30.6	0.00	30.6	3.14	0.07	—	131
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	5.06	0.00	5.06	0.52	0.01	—	21.7
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	5.06	0.00	5.06	0.52	0.01	—	21.7

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	111	0.00	111	11.1	0.00	—	388
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	111	0.00	111	11.1	0.00	—	388
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	111	0.00	111	11.1	0.00	—	388

Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	111	0.00	111	11.1	0.00	—	388
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	18.3	0.00	18.3	1.83	0.00	—	64.2
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	18.3	0.00	18.3	1.83	0.00	—	64.2

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.98	0.98
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.98	0.98
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.98	0.98
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.98	0.98
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.16	0.16
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.16	0.16

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Condo/Townhouse	1,857	2,066	1,593	674,920	29,067	32,331	24,933	10,564,148
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Condo/Townhouse	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	125
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
276954.9975	92,318	0.00	0.00	16,412

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	270

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Condo/Townhouse	2,037,501	0.00	0.0000	0.0000	5,796,488
Parking Lot	239,621	0.00	0.0000	0.0000	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Condo/Townhouse	15,960,107	876,414
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)

Condo/Townhouse	206	—
Parking Lot	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Condo/Townhouse	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Condo/Townhouse	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	32.8	annual days of extreme heat
Extreme Precipitation	0.00	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.19	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A

Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	11.6
AQ-PM	19.1
AQ-DPM	9.09
Drinking Water	30.6
Lead Risk Housing	50.8
Pesticides	90.5
Toxic Releases	7.58
Traffic	3.06
Effect Indicators	—
CleanUp Sites	74.2
Groundwater	77.9

Haz Waste Facilities/Generators	93.2
Impaired Water Bodies	100.0
Solid Waste	86.5
Sensitive Population	—
Asthma	87.6
Cardio-vascular	83.2
Low Birth Weights	26.9
Socioeconomic Factor Indicators	—
Education	82.7
Housing	51.4
Linguistic	88.8
Poverty	94.9
Unemployment	99.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	16.66880534
Employed	7.173104068
Median HI	5.299627871
Education	—
Bachelor's or higher	5.017323239
High school enrollment	16.8741178
Preschool enrollment	68.89516233
Transportation	—
Auto Access	18.40112922
Active commuting	51.10997049

Social	—
2-parent households	13.28114975
Voting	16.79712563
Neighborhood	—
Alcohol availability	70.25535737
Park access	33.85089183
Retail density	4.311561658
Supermarket access	49.58295907
Tree canopy	0.782753753
Housing	—
Homeownership	38.3036058
Housing habitability	30.96368536
Low-inc homeowner severe housing cost burden	26.76761196
Low-inc renter severe housing cost burden	52.89362248
Uncrowded housing	38.58591043
Health Outcomes	—
Insured adults	21.00603105
Arthritis	0.0
Asthma ER Admissions	30.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	41.7
Cognitively Disabled	50.3
Physically Disabled	19.5

Heart Attack ER Admissions	46.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	54.3
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	14.1
Elderly	42.0
English Speaking	18.7
Foreign-born	65.3
Outdoor Workers	5.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	85.8
Traffic Density	4.9
Traffic Access	23.0
Other Indices	—
Hardship	92.9
Other Decision Support	—
2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	82.0
Healthy Places Index Score for Project Location (b)	11.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Land use data are based on applicant-provided buildout assumptions.
Operations: Vehicle Data	Trip rates are based on ITE Land Use Code 220.
Operations: Road Dust	All roads used by future developments projects within the Specific Plan Area would be required to be paved. Per ICAPCD guidance a value of 85% paved is assumed in the modeling to account for the high levels of entrained dust generated from vehicle travel on paved roadways in the region.
Operations: Hearths	Residences would not be assumed to include fireplaces of any kind.
Operations: Landscape Equipment	Assumed 270 summer days for desert region.
Operations: Water and Waste Water	Water data are based on applicant-provided calculations for the land use.

Operations: Energy Use	Land use is not anticipated to incorporate the use of natural gas. Default natural gas consumption was converted to electricity.
Characteristics: Utility Information	GHG intensity factors adjusted per RPS requirements.

Lithium Valley Operation - Phase 2 - Intermodal Rail Hub Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Lithium Valley Operation - Phase 2 - Intermodal Rail Hub
Operational Year	2045
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	4.80
Location	33.18829759139308, -115.6026869228474
County	Imperial
City	Unincorporated
Air District	Imperial County APCD
Air Basin	Salton Sea
TAZ	5600
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Unrefrigerated Warehouse-Rail	1,717	1000sqft	807	1,716,620	858,310	—	—	—
Parking Lot	8,583	1000sqft	197	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	69.5	67.1	25.4	198	0.42	1.34	5,495	5,496	1.30	552	553	917	47,390	48,307	93.4	1.50	9.82	51,098
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	55.3	53.9	25.9	84.3	0.37	1.21	5,495	5,496	1.20	552	553	917	42,898	43,815	93.4	1.55	0.25	46,610
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	63.1	61.1	20.1	148	0.38	1.00	5,423	5,424	0.96	545	546	917	43,757	44,674	93.3	1.52	4.24	47,465
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	11.5	11.2	3.66	27.0	0.07	0.18	990	990	0.18	99.4	99.6	152	7,245	7,396	15.4	0.25	0.70	7,858

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	7.62	6.91	9.05	110	0.35	0.18	5,495	5,495	0.17	552	552	—	35,324	35,324	0.60	1.35	9.82	35,752

Area	58.2	57.2	0.63	74.7	< 0.005	0.13	—	0.13	0.10	—	0.10	—	307	307	0.01	< 0.005	—	308
Energy	0.97	0.48	8.80	7.39	0.05	0.67	—	0.67	0.67	—	0.67	—	10,500	10,500	0.93	0.02	—	10,529
Water	—	—	—	—	—	—	—	—	—	—	—	47.2	0.00	47.2	4.84	0.12	—	203
Waste	—	—	—	—	—	—	—	—	—	—	—	870	0.00	870	86.9	0.00	—	3,043
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	2.70	2.46	6.88	6.28	0.01	0.36	0.00	0.36	0.36	0.00	0.36	0.00	1,259	1,259	0.05	0.01	0.00	1,263
Total	69.5	67.1	25.4	198	0.42	1.34	5,495	5,496	1.30	552	553	917	47,390	48,307	93.4	1.50	9.82	51,098
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	6.73	6.04	10.2	70.6	0.31	0.18	5,495	5,495	0.17	552	552	—	31,138	31,138	0.61	1.40	0.25	31,572
Area	44.9	44.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.97	0.48	8.80	7.39	0.05	0.67	—	0.67	0.67	—	0.67	—	10,500	10,500	0.93	0.02	—	10,529
Water	—	—	—	—	—	—	—	—	—	—	—	47.2	0.00	47.2	4.84	0.12	—	203
Waste	—	—	—	—	—	—	—	—	—	—	—	870	0.00	870	86.9	0.00	—	3,043
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	2.70	2.46	6.88	6.28	0.01	0.36	0.00	0.36	0.36	0.00	0.36	0.00	1,259	1,259	0.05	0.01	0.00	1,263
Total	55.3	53.9	25.9	84.3	0.37	1.21	5,495	5,496	1.20	552	553	917	42,898	43,815	93.4	1.55	0.25	46,610
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	6.98	6.29	9.85	84.4	0.32	0.18	5,423	5,423	0.17	545	545	—	32,857	32,857	0.60	1.38	4.24	33,289
Area	54.8	54.0	0.46	55.2	< 0.005	0.10	—	0.10	0.07	—	0.07	—	227	227	0.01	< 0.005	—	228
Energy	0.97	0.48	8.80	7.39	0.05	0.67	—	0.67	0.67	—	0.67	—	10,500	10,500	0.93	0.02	—	10,529
Water	—	—	—	—	—	—	—	—	—	—	—	47.2	0.00	47.2	4.84	0.12	—	203
Waste	—	—	—	—	—	—	—	—	—	—	—	870	0.00	870	86.9	0.00	—	3,043
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Stationa	0.37	0.34	0.94	0.86	< 0.005	0.05	0.00	0.05	0.05	0.00	0.05	0.00	173	173	0.01	< 0.005	0.00	173
Total	63.1	61.1	20.1	148	0.38	1.00	5,423	5,424	0.96	545	546	917	43,757	44,674	93.3	1.52	4.24	47,465
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.27	1.15	1.80	15.4	0.06	0.03	990	990	0.03	99.4	99.4	—	5,440	5,440	0.10	0.23	0.70	5,511
Area	10.00	9.86	0.08	10.1	< 0.005	0.02	—	0.02	0.01	—	0.01	—	37.6	37.6	< 0.005	< 0.005	—	37.7
Energy	0.18	0.09	1.61	1.35	0.01	0.12	—	0.12	0.12	—	0.12	—	1,738	1,738	0.15	< 0.005	—	1,743
Water	—	—	—	—	—	—	—	—	—	—	—	7.82	0.00	7.82	0.80	0.02	—	33.5
Waste	—	—	—	—	—	—	—	—	—	—	—	144	0.00	144	14.4	0.00	—	504
Off-Roa d	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationa ry	0.07	0.06	0.17	0.16	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	28.6	28.6	< 0.005	< 0.005	0.00	28.7
Total	11.5	11.2	3.66	27.0	0.07	0.18	990	990	0.18	99.4	99.6	152	7,245	7,396	15.4	0.25	0.70	7,858

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrig erated Wareho use-Rail	7.62	6.91	9.05	110	0.35	0.18	5,495	5,495	0.17	552	552	—	35,324	35,324	0.60	1.35	9.82	35,752
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	7.62	6.91	9.05	110	0.35	0.18	5,495	5,495	0.17	552	552	—	35,324	35,324	0.60	1.35	9.82	35,752

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-Rail	6.73	6.04	10.2	70.6	0.31	0.18	5,495	5,495	0.17	552	552	—	31,138	31,138	0.61	1.40	0.25	31,572
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	6.73	6.04	10.2	70.6	0.31	0.18	5,495	5,495	0.17	552	552	—	31,138	31,138	0.61	1.40	0.25	31,572
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-Rail	1.27	1.15	1.80	15.4	0.06	0.03	990	990	0.03	99.4	99.4	—	5,440	5,440	0.10	0.23	0.70	5,511
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	1.27	1.15	1.80	15.4	0.06	0.03	990	990	0.03	99.4	99.4	—	5,440	5,440	0.10	0.23	0.70	5,511

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

undefined	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
undefined	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
undefined	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unrefrigerated	0.97	0.48	8.80	7.39	0.05	0.67	—	0.67	0.67	—	0.67	—	10,500	10,500	0.93	0.02	—	10,529
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.97	0.48	8.80	7.39	0.05	0.67	—	0.67	0.67	—	0.67	—	10,500	10,500	0.93	0.02	—	10,529
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-Rail	0.97	0.48	8.80	7.39	0.05	0.67	—	0.67	0.67	—	0.67	—	10,500	10,500	0.93	0.02	—	10,529
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.97	0.48	8.80	7.39	0.05	0.67	—	0.67	0.67	—	0.67	—	10,500	10,500	0.93	0.02	—	10,529
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-Rail	0.18	0.09	1.61	1.35	0.01	0.12	—	0.12	0.12	—	0.12	—	1,738	1,738	0.15	< 0.005	—	1,743
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.18	0.09	1.61	1.35	0.01	0.12	—	0.12	0.12	—	0.12	—	1,738	1,738	0.15	< 0.005	—	1,743

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Consumer Product	37.4	37.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	7.52	7.52	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	13.3	12.3	0.63	74.7	< 0.005	0.13	—	0.13	0.10	—	0.10	—	307	307	0.01	< 0.005	—	308
Total	58.2	57.2	0.63	74.7	< 0.005	0.13	—	0.13	0.10	—	0.10	—	307	307	0.01	< 0.005	—	308
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	37.4	37.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	7.52	7.52	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	44.9	44.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	6.83	6.83	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	1.37	1.37	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	1.80	1.66	0.08	10.1	< 0.005	0.02	—	0.02	0.01	—	0.01	—	37.6	37.6	< 0.005	< 0.005	—	37.7
Total	10.00	9.86	0.08	10.1	< 0.005	0.02	—	0.02	0.01	—	0.01	—	37.6	37.6	< 0.005	< 0.005	—	37.7

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	47.2	0.00	47.2	4.84	0.12	—	203
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	47.2	0.00	47.2	4.84	0.12	—	203
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	47.2	0.00	47.2	4.84	0.12	—	203
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	47.2	0.00	47.2	4.84	0.12	—	203
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	7.82	0.00	7.82	0.80	0.02	—	33.5
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	7.82	0.00	7.82	0.80	0.02	—	33.5

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	870	0.00	870	86.9	0.00	—	3,043
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	870	0.00	870	86.9	0.00	—	3,043
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	870	0.00	870	86.9	0.00	—	3,043
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	870	0.00	870	86.9	0.00	—	3,043
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	144	0.00	144	14.4	0.00	—	504
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	144	0.00	144	14.4	0.00	—	504

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Welders	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Air Compressors	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Construction Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Rough Terrain Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Material Handling Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Crawler Tractors	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Generator Sets	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Sweepers/Scrubbers	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Cranes	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Tractors/Loaders/Backhoes	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other General Industrial Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Welders	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Air Compressors	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Construction Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Rough Terrain Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Material Handling Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Crawler Tractors	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Generator Sets	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Sweepers/Scrubbers	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Cranes	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Tractors/Loaders/Backhoes	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other General Industrial Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Welders	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Air Compressors	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Construction Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Rough Terrain Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Other Material Handling Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Crawler Tractors	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Generator Sets	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Sweepers/Scrubbers	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Cranes	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Tractors/Loaders/Backhoes	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other General Industrial Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Emergency Generator	2.70	2.46	6.88	6.28	0.01	0.36	0.00	0.36	0.36	0.00	0.36	0.00	1,259	1,259	0.05	0.01	0.00	1,263
Total	2.70	2.46	6.88	6.28	0.01	0.36	0.00	0.36	0.36	0.00	0.36	0.00	1,259	1,259	0.05	0.01	0.00	1,263
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	2.70	2.46	6.88	6.28	0.01	0.36	0.00	0.36	0.36	0.00	0.36	0.00	1,259	1,259	0.05	0.01	0.00	1,263
Total	2.70	2.46	6.88	6.28	0.01	0.36	0.00	0.36	0.36	0.00	0.36	0.00	1,259	1,259	0.05	0.01	0.00	1,263
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.07	0.06	0.17	0.16	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	28.6	28.6	< 0.005	< 0.005	0.00	28.7
Total	0.07	0.06	0.17	0.16	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	28.6	28.6	< 0.005	< 0.005	0.00	28.7

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Unrefrigerated Warehouse-Rail	2,403	2,403	2,403	877,193	48,952	48,952	48,952	17,867,320
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	2,574,930	858,310	514,984

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	270

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Unrefrigerated Warehouse-Rail	19,250,889	0.00	0.0000	0.0000	32,763,907
Parking Lot	7,518,763	0.00	0.0000	0.0000	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Unrefrigerated Warehouse-Rail	24,652,869	17,569,511
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Unrefrigerated Warehouse-Rail	1,614	—
Parking Lot	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Welders	Electric	Average	3.00	8.00	46.0	0.45
Air Compressors	Electric	Average	3.00	8.00	37.0	0.48
Other Construction Equipment	Electric	Average	3.00	8.00	160	0.43
Forklifts	Electric	Average	206	8.00	200	0.20
Rough Terrain Forklifts	Electric	Average	6.00	8.00	200	0.40
Other Material Handling Equipment	Electric	Average	3.00	8.00	136	0.59
Crawler Tractors	Electric	Average	3.00	8.00	250	0.39
Generator Sets	Electric	Average	3.00	8.00	200	0.74
Sweepers/Scrubbers	Electric	Average	3.00	8.00	60.0	0.68
Cranes	Electric	Average	3.00	8.00	367	0.29
Tractors/Loaders/Backhoes	Electric	Average	3.00	8.00	158	0.55
Other General Industrial Equipment	Electric	Average	3.00	8.00	35.0	0.34

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
Emergency Generator	Diesel	3.00	1.00	50.0	500	0.73

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	32.8	annual days of extreme heat
Extreme Precipitation	0.00	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.19	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	11.6
AQ-PM	19.1

AQ-DPM	9.09
Drinking Water	30.6
Lead Risk Housing	50.8
Pesticides	90.5
Toxic Releases	7.58
Traffic	3.06
Effect Indicators	—
CleanUp Sites	74.2
Groundwater	77.9
Haz Waste Facilities/Generators	93.2
Impaired Water Bodies	100.0
Solid Waste	86.5
Sensitive Population	—
Asthma	87.6
Cardio-vascular	83.2
Low Birth Weights	26.9
Socioeconomic Factor Indicators	—
Education	82.7
Housing	51.4
Linguistic	88.8
Poverty	94.9
Unemployment	99.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	16.66880534

Employed	7.173104068
Median HI	5.299627871
Education	—
Bachelor's or higher	5.017323239
High school enrollment	16.8741178
Preschool enrollment	68.89516233
Transportation	—
Auto Access	18.40112922
Active commuting	51.10997049
Social	—
2-parent households	13.28114975
Voting	16.79712563
Neighborhood	—
Alcohol availability	70.25535737
Park access	33.85089183
Retail density	4.311561658
Supermarket access	49.58295907
Tree canopy	0.782753753
Housing	—
Homeownership	38.3036058
Housing habitability	30.96368536
Low-inc homeowner severe housing cost burden	26.76761196
Low-inc renter severe housing cost burden	52.89362248
Uncrowded housing	38.58591043
Health Outcomes	—
Insured adults	21.00603105
Arthritis	0.0
Asthma ER Admissions	30.1

High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	41.7
Cognitively Disabled	50.3
Physically Disabled	19.5
Heart Attack ER Admissions	46.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	54.3
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	14.1
Elderly	42.0
English Speaking	18.7
Foreign-born	65.3
Outdoor Workers	5.4

Climate Change Adaptive Capacity	—
Impervious Surface Cover	85.8
Traffic Density	4.9
Traffic Access	23.0
Other Indices	—
Hardship	92.9
Other Decision Support	—
2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	82.0
Healthy Places Index Score for Project Location (b)	11.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification

Land Use	Land use data are based on applicant-provided buildout assumptions.
Operations: Vehicle Data	Trip rates are based on ITE Land Use Code 154.
Operations: Landscape Equipment	Assumed 270 summer days for desert region.
Operations: Road Dust	All roads used by future developments projects within the Specific Plan Area would be required to be paved. Per ICAPCD guidance a value of 85% paved is assumed in the modeling to account for the high levels of entrained dust generated from vehicle travel on paved roadways in the region
Operations: Off-Road Equipment	other construction equipment = rail car wheel change machine rough terrain forklifts = yard trucks other material handling equipment = side pick crawler tractors = yard tractors
Operations: Water and Waste Water	Water data are based on applicant-provided calculations for the land use
Characteristics: Utility Information	GHG intensity factors adjusted per RPS requirements.
Operations: Emergency Generators and Fire Pumps	Assumed 3 back-up generators each operating 1 hour/day and 50 hours/year for maintenance and testing.

Lithium Valley Operation - Phase 2 - Intermodal Rail Hub Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Lithium Valley Operation - Phase 2 - Intermodal Rail Hub
Operational Year	2045
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	4.80
Location	33.18829759139308, -115.6026869228474
County	Imperial
City	Unincorporated
Air District	Imperial County APCD
Air Basin	Salton Sea
TAZ	5600
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Unrefrigerated Warehouse-Rail	1,717	1000sqft	807	1,716,620	858,310	—	—	—
Parking Lot	8,583	1000sqft	197	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	69.5	67.1	25.4	198	0.42	1.34	5,495	5,496	1.30	552	553	954	47,390	48,345	97.2	1.59	9.82	51,258
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	55.3	53.9	25.9	84.3	0.37	1.21	5,495	5,496	1.20	552	553	954	42,898	43,852	97.2	1.64	0.25	46,770
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	63.1	61.1	20.1	148	0.38	1.00	5,423	5,424	0.96	545	546	954	43,757	44,711	97.1	1.61	4.24	47,625
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	11.5	11.2	3.66	27.0	0.07	0.18	990	990	0.18	99.4	99.6	158	7,245	7,402	16.1	0.27	0.70	7,885

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	7.62	6.91	9.05	110	0.35	0.18	5,495	5,495	0.17	552	552	—	35,324	35,324	0.60	1.35	9.82	35,752

Area	58.2	57.2	0.63	74.7	< 0.005	0.13	—	0.13	0.10	—	0.10	—	307	307	0.01	< 0.005	—	308
Energy	0.97	0.48	8.80	7.39	0.05	0.67	—	0.67	0.67	—	0.67	—	10,500	10,500	0.93	0.02	—	10,529
Water	—	—	—	—	—	—	—	—	—	—	—	84.6	0.00	84.6	8.67	0.21	—	363
Waste	—	—	—	—	—	—	—	—	—	—	—	870	0.00	870	86.9	0.00	—	3,043
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	2.70	2.46	6.88	6.28	0.01	0.36	0.00	0.36	0.36	0.00	0.36	0.00	1,259	1,259	0.05	0.01	0.00	1,263
Total	69.5	67.1	25.4	198	0.42	1.34	5,495	5,496	1.30	552	553	954	47,390	48,345	97.2	1.59	9.82	51,258
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	6.73	6.04	10.2	70.6	0.31	0.18	5,495	5,495	0.17	552	552	—	31,138	31,138	0.61	1.40	0.25	31,572
Area	44.9	44.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.97	0.48	8.80	7.39	0.05	0.67	—	0.67	0.67	—	0.67	—	10,500	10,500	0.93	0.02	—	10,529
Water	—	—	—	—	—	—	—	—	—	—	—	84.6	0.00	84.6	8.67	0.21	—	363
Waste	—	—	—	—	—	—	—	—	—	—	—	870	0.00	870	86.9	0.00	—	3,043
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	2.70	2.46	6.88	6.28	0.01	0.36	0.00	0.36	0.36	0.00	0.36	0.00	1,259	1,259	0.05	0.01	0.00	1,263
Total	55.3	53.9	25.9	84.3	0.37	1.21	5,495	5,496	1.20	552	553	954	42,898	43,852	97.2	1.64	0.25	46,770
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	6.98	6.29	9.85	84.4	0.32	0.18	5,423	5,423	0.17	545	545	—	32,857	32,857	0.60	1.38	4.24	33,289
Area	54.8	54.0	0.46	55.2	< 0.005	0.10	—	0.10	0.07	—	0.07	—	227	227	0.01	< 0.005	—	228
Energy	0.97	0.48	8.80	7.39	0.05	0.67	—	0.67	0.67	—	0.67	—	10,500	10,500	0.93	0.02	—	10,529
Water	—	—	—	—	—	—	—	—	—	—	—	84.6	0.00	84.6	8.67	0.21	—	363
Waste	—	—	—	—	—	—	—	—	—	—	—	870	0.00	870	86.9	0.00	—	3,043
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Stationa	0.37	0.34	0.94	0.86	< 0.005	0.05	0.00	0.05	0.05	0.00	0.05	0.00	173	173	0.01	< 0.005	0.00	173
Total	63.1	61.1	20.1	148	0.38	1.00	5,423	5,424	0.96	545	546	954	43,757	44,711	97.1	1.61	4.24	47,625
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.27	1.15	1.80	15.4	0.06	0.03	990	990	0.03	99.4	99.4	—	5,440	5,440	0.10	0.23	0.70	5,511
Area	10.00	9.86	0.08	10.1	< 0.005	0.02	—	0.02	0.01	—	0.01	—	37.6	37.6	< 0.005	< 0.005	—	37.7
Energy	0.18	0.09	1.61	1.35	0.01	0.12	—	0.12	0.12	—	0.12	—	1,738	1,738	0.15	< 0.005	—	1,743
Water	—	—	—	—	—	—	—	—	—	—	—	14.0	0.00	14.0	1.44	0.03	—	60.0
Waste	—	—	—	—	—	—	—	—	—	—	—	144	0.00	144	14.4	0.00	—	504
Off-Roa d	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationa ry	0.07	0.06	0.17	0.16	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	28.6	28.6	< 0.005	< 0.005	0.00	28.7
Total	11.5	11.2	3.66	27.0	0.07	0.18	990	990	0.18	99.4	99.6	158	7,245	7,402	16.1	0.27	0.70	7,885

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrig erated Wareho use-Rail	7.62	6.91	9.05	110	0.35	0.18	5,495	5,495	0.17	552	552	—	35,324	35,324	0.60	1.35	9.82	35,752
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	7.62	6.91	9.05	110	0.35	0.18	5,495	5,495	0.17	552	552	—	35,324	35,324	0.60	1.35	9.82	35,752

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-Rail	6.73	6.04	10.2	70.6	0.31	0.18	5,495	5,495	0.17	552	552	—	31,138	31,138	0.61	1.40	0.25	31,572
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	6.73	6.04	10.2	70.6	0.31	0.18	5,495	5,495	0.17	552	552	—	31,138	31,138	0.61	1.40	0.25	31,572
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-Rail	1.27	1.15	1.80	15.4	0.06	0.03	990	990	0.03	99.4	99.4	—	5,440	5,440	0.10	0.23	0.70	5,511
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	1.27	1.15	1.80	15.4	0.06	0.03	990	990	0.03	99.4	99.4	—	5,440	5,440	0.10	0.23	0.70	5,511

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

undefined	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
undefined	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
undefined	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unrefrigerated	0.97	0.48	8.80	7.39	0.05	0.67	—	0.67	0.67	—	0.67	—	10,500	10,500	0.93	0.02	—	10,529
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.97	0.48	8.80	7.39	0.05	0.67	—	0.67	0.67	—	0.67	—	10,500	10,500	0.93	0.02	—	10,529
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-Rail	0.97	0.48	8.80	7.39	0.05	0.67	—	0.67	0.67	—	0.67	—	10,500	10,500	0.93	0.02	—	10,529
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.97	0.48	8.80	7.39	0.05	0.67	—	0.67	0.67	—	0.67	—	10,500	10,500	0.93	0.02	—	10,529
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-Rail	0.18	0.09	1.61	1.35	0.01	0.12	—	0.12	0.12	—	0.12	—	1,738	1,738	0.15	< 0.005	—	1,743
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.18	0.09	1.61	1.35	0.01	0.12	—	0.12	0.12	—	0.12	—	1,738	1,738	0.15	< 0.005	—	1,743

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Consumer Product	37.4	37.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	7.52	7.52	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	13.3	12.3	0.63	74.7	< 0.005	0.13	—	0.13	0.10	—	0.10	—	307	307	0.01	< 0.005	—	308
Total	58.2	57.2	0.63	74.7	< 0.005	0.13	—	0.13	0.10	—	0.10	—	307	307	0.01	< 0.005	—	308
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	37.4	37.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	7.52	7.52	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	44.9	44.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	6.83	6.83	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	1.37	1.37	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	1.80	1.66	0.08	10.1	< 0.005	0.02	—	0.02	0.01	—	0.01	—	37.6	37.6	< 0.005	< 0.005	—	37.7
Total	10.00	9.86	0.08	10.1	< 0.005	0.02	—	0.02	0.01	—	0.01	—	37.6	37.6	< 0.005	< 0.005	—	37.7

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	84.6	0.00	84.6	8.67	0.21	—	363
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	84.6	0.00	84.6	8.67	0.21	—	363
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	84.6	0.00	84.6	8.67	0.21	—	363
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	84.6	0.00	84.6	8.67	0.21	—	363
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	14.0	0.00	14.0	1.44	0.03	—	60.0
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	14.0	0.00	14.0	1.44	0.03	—	60.0

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	870	0.00	870	86.9	0.00	—	3,043
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	870	0.00	870	86.9	0.00	—	3,043
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	870	0.00	870	86.9	0.00	—	3,043
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	870	0.00	870	86.9	0.00	—	3,043
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	144	0.00	144	14.4	0.00	—	504
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	144	0.00	144	14.4	0.00	—	504

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Welders	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Air Compressors	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Construction Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Rough Terrain Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Material Handling Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Crawler Tractors	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Generator Sets	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Sweepers/Scrubbers	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Cranes	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Tractors/Loaders/Backhoes	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other General Industrial Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Welders	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Air Compressors	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Construction Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Rough Terrain Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Material Handling Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Crawler Tractors	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Generator Sets	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Sweepers/Scrubbers	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Cranes	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Tractors/Loaders/Backhoes	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other General Industrial Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Welders	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Air Compressors	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Construction Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Rough Terrain Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Other Material Handling Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Crawler Tractors	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Generator Sets	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Sweepers/Scrubbers	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Cranes	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Tractors/Loaders/Backhoes	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other General Industrial Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Emergency Generator	2.70	2.46	6.88	6.28	0.01	0.36	0.00	0.36	0.36	0.00	0.36	0.00	1,259	1,259	0.05	0.01	0.00	1,263
Total	2.70	2.46	6.88	6.28	0.01	0.36	0.00	0.36	0.36	0.00	0.36	0.00	1,259	1,259	0.05	0.01	0.00	1,263
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	2.70	2.46	6.88	6.28	0.01	0.36	0.00	0.36	0.36	0.00	0.36	0.00	1,259	1,259	0.05	0.01	0.00	1,263
Total	2.70	2.46	6.88	6.28	0.01	0.36	0.00	0.36	0.36	0.00	0.36	0.00	1,259	1,259	0.05	0.01	0.00	1,263
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.07	0.06	0.17	0.16	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	28.6	28.6	< 0.005	< 0.005	0.00	28.7
Total	0.07	0.06	0.17	0.16	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	28.6	28.6	< 0.005	< 0.005	0.00	28.7

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Unrefrigerated Warehouse-Rail	2,403	2,403	2,403	877,193	48,952	48,952	48,952	17,867,320
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	2,574,930	858,310	514,984

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	270

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Unrefrigerated Warehouse-Rail	19,250,889	0.00	0.0000	0.0000	32,763,907
Parking Lot	7,518,763	0.00	0.0000	0.0000	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Unrefrigerated Warehouse-Rail	44,123,811	1,952,886
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Unrefrigerated Warehouse-Rail	1,614	—
Parking Lot	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Welders	Electric	Average	3.00	8.00	46.0	0.45
Air Compressors	Electric	Average	3.00	8.00	37.0	0.48
Other Construction Equipment	Electric	Average	3.00	8.00	160	0.43
Forklifts	Electric	Average	206	8.00	200	0.20
Rough Terrain Forklifts	Electric	Average	6.00	8.00	200	0.40
Other Material Handling Equipment	Electric	Average	3.00	8.00	136	0.59
Crawler Tractors	Electric	Average	3.00	8.00	250	0.39
Generator Sets	Electric	Average	3.00	8.00	200	0.74
Sweepers/Scrubbers	Electric	Average	3.00	8.00	60.0	0.68
Cranes	Electric	Average	3.00	8.00	367	0.29
Tractors/Loaders/Backhoes	Electric	Average	3.00	8.00	158	0.55
Other General Industrial Equipment	Electric	Average	3.00	8.00	35.0	0.34

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
Emergency Generator	Diesel	3.00	1.00	50.0	500	0.73

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	32.8	annual days of extreme heat
Extreme Precipitation	0.00	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.19	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	11.6
AQ-PM	19.1

AQ-DPM	9.09
Drinking Water	30.6
Lead Risk Housing	50.8
Pesticides	90.5
Toxic Releases	7.58
Traffic	3.06
Effect Indicators	—
CleanUp Sites	74.2
Groundwater	77.9
Haz Waste Facilities/Generators	93.2
Impaired Water Bodies	100.0
Solid Waste	86.5
Sensitive Population	—
Asthma	87.6
Cardio-vascular	83.2
Low Birth Weights	26.9
Socioeconomic Factor Indicators	—
Education	82.7
Housing	51.4
Linguistic	88.8
Poverty	94.9
Unemployment	99.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	16.66880534

Employed	7.173104068
Median HI	5.299627871
Education	—
Bachelor's or higher	5.017323239
High school enrollment	16.8741178
Preschool enrollment	68.89516233
Transportation	—
Auto Access	18.40112922
Active commuting	51.10997049
Social	—
2-parent households	13.28114975
Voting	16.79712563
Neighborhood	—
Alcohol availability	70.25535737
Park access	33.85089183
Retail density	4.311561658
Supermarket access	49.58295907
Tree canopy	0.782753753
Housing	—
Homeownership	38.3036058
Housing habitability	30.96368536
Low-inc homeowner severe housing cost burden	26.76761196
Low-inc renter severe housing cost burden	52.89362248
Uncrowded housing	38.58591043
Health Outcomes	—
Insured adults	21.00603105
Arthritis	0.0
Asthma ER Admissions	30.1

High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	41.7
Cognitively Disabled	50.3
Physically Disabled	19.5
Heart Attack ER Admissions	46.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	54.3
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	14.1
Elderly	42.0
English Speaking	18.7
Foreign-born	65.3
Outdoor Workers	5.4

Climate Change Adaptive Capacity	—
Impervious Surface Cover	85.8
Traffic Density	4.9
Traffic Access	23.0
Other Indices	—
Hardship	92.9
Other Decision Support	—
2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	82.0
Healthy Places Index Score for Project Location (b)	11.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification

Land Use	Land use data are based on applicant-provided buildout assumptions.
Operations: Vehicle Data	Trip rates are based on ITE Land Use Code 154.
Operations: Landscape Equipment	Assumed 270 summer days for desert region.
Operations: Road Dust	All roads used by future developments projects within the Specific Plan Area would be required to be paved. Per ICAPCD guidance a value of 85% paved is assumed in the modeling to account for the high levels of entrained dust generated from vehicle travel on paved roadways in the region
Operations: Off-Road Equipment	other construction equipment = rail car wheel change machine rough terrain forklifts = yard trucks other material handling equipment = side pick crawler tractors = yard tractors
Operations: Water and Waste Water	Water data are based on applicant-provided calculations for the land use
Characteristics: Utility Information	GHG intensity factors adjusted per RPS requirements.
Operations: Emergency Generators and Fire Pumps	Assumed 3 back-up generators each operating 1 hour/day and 50 hours/year for maintenance and testing.

Lithium Valley Operation - Phase 2 - Logistics and Warehousing Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Lithium Valley Operation - Phase 2 - Logistics and Warehousing
Operational Year	2045
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	4.80
Location	33.18829759139308, -115.6026869228474
County	Imperial
City	Unincorporated
Air District	Imperial County APCD
Air Basin	Salton Sea
TAZ	5600
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Unrefrigerated Warehouse-No Rail	1,410	1000sqft	663	1,410,489	705,244	—	—	—

Unrefrigerated Warehouse-Rail	535	1000sqft	251	535,013	267,506	—	—	—
Refrigerated Warehouse-No Rail	190	1000sqft	89.2	189,858	94,929	—	—	—
Refrigerated Warehouse-Rail	153	1000sqft	72.1	153,466	76,733	—	—	—
Parking Lot	11,444	1000sqft	263	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	87.3	84.3	87.3	236	1.15	3.08	10,458	10,461	2.97	1,051	1,054	1,272	126,062	127,334	129	12.0	9,188	143,323
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	69.0	67.4	93.5	88.7	1.09	2.91	10,458	10,461	2.83	1,051	1,054	1,272	120,472	121,744	129	12.0	9,151	137,711
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	79.9	77.5	86.9	174	1.11	2.73	10,321	10,324	2.62	1,038	1,040	1,272	121,811	123,083	129	12.0	9,166	139,056
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	14.6	14.1	15.9	31.7	0.20	0.50	1,884	1,884	0.48	189	190	211	20,167	20,378	21.4	1.98	1,518	23,022

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	5.64	4.90	67.8	121	1.06	1.66	10,458	10,460	1.58	1,051	1,053	—	110,433	110,433	0.65	11.6	38.5	113,959
Area	77.6	76.3	0.84	99.5	0.01	0.18	—	0.18	0.13	—	0.13	—	409	409	0.02	< 0.005	—	411
Energy	1.29	0.64	11.7	9.83	0.07	0.89	—	0.89	0.89	—	0.89	—	13,960	13,960	1.24	0.03	—	13,999
Water	—	—	—	—	—	—	—	—	—	—	—	113	0.00	113	11.6	0.27	—	484
Waste	—	—	—	—	—	—	—	—	—	—	—	1,160	0.00	1,160	116	0.00	—	4,057
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9,150	9,150
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	2.70	2.46	6.88	6.28	0.01	0.36	0.00	0.36	0.36	0.00	0.36	0.00	1,259	1,259	0.05	0.01	0.00	1,263
Total	87.3	84.3	87.3	236	1.15	3.08	10,458	10,461	2.97	1,051	1,054	1,272	126,062	127,334	129	12.0	9,188	143,323
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	5.10	4.39	74.9	72.6	1.01	1.66	10,458	10,460	1.58	1,051	1,053	—	105,252	105,252	0.66	11.7	1.00	108,758
Area	59.9	59.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	1.29	0.64	11.7	9.83	0.07	0.89	—	0.89	0.89	—	0.89	—	13,960	13,960	1.24	0.03	—	13,999
Water	—	—	—	—	—	—	—	—	—	—	—	113	0.00	113	11.6	0.27	—	484
Waste	—	—	—	—	—	—	—	—	—	—	—	1,160	0.00	1,160	116	0.00	—	4,057
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9,150	9,150
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	2.70	2.46	6.88	6.28	0.01	0.36	0.00	0.36	0.36	0.00	0.36	0.00	1,259	1,259	0.05	0.01	0.00	1,263
Total	69.0	67.4	93.5	88.7	1.09	2.91	10,458	10,461	2.83	1,051	1,054	1,272	120,472	121,744	129	12.0	9,151	137,711

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	5.26	4.53	73.7	89.4	1.03	1.66	10,321	10,323	1.58	1,038	1,039	—	107,375	107,375	0.65	11.7	16.6	110,890
Area	73.0	72.0	0.62	73.6	< 0.005	0.13	—	0.13	0.10	—	0.10	—	303	303	0.01	< 0.005	—	304
Energy	1.29	0.64	11.7	9.83	0.07	0.89	—	0.89	0.89	—	0.89	—	13,960	13,960	1.24	0.03	—	13,999
Water	—	—	—	—	—	—	—	—	—	—	—	113	0.00	113	11.6	0.27	—	484
Waste	—	—	—	—	—	—	—	—	—	—	—	1,160	0.00	1,160	116	0.00	—	4,057
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9,150	9,150
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	0.37	0.34	0.94	0.86	< 0.005	0.05	0.00	0.05	0.05	0.00	0.05	0.00	173	173	0.01	< 0.005	0.00	173
Total	79.9	77.5	86.9	174	1.11	2.73	10,321	10,324	2.62	1,038	1,040	1,272	121,811	123,083	129	12.0	9,166	139,056
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.96	0.83	13.4	16.3	0.19	0.30	1,884	1,884	0.29	189	190	—	17,777	17,777	0.11	1.93	2.75	18,359
Area	13.3	13.1	0.11	13.4	< 0.005	0.02	—	0.02	0.02	—	0.02	—	50.1	50.1	< 0.005	< 0.005	—	50.3
Energy	0.23	0.12	2.14	1.79	0.01	0.16	—	0.16	0.16	—	0.16	—	2,311	2,311	0.20	< 0.005	—	2,318
Water	—	—	—	—	—	—	—	—	—	—	—	18.7	0.00	18.7	1.91	0.05	—	80.1
Waste	—	—	—	—	—	—	—	—	—	—	—	192	0.00	192	19.2	0.00	—	672
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,515	1,515
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	0.07	0.06	0.17	0.16	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	28.6	28.6	< 0.005	< 0.005	0.00	28.7
Total	14.6	14.1	15.9	31.7	0.20	0.50	1,884	1,884	0.48	189	190	211	20,167	20,378	21.4	1.98	1,518	23,022

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	3.26	3.04	2.65	92.8	0.31	0.05	5,398	5,398	0.05	542	542	—	31,083	31,083	0.26	0.42	6.06	31,221
Unrefrigerated Warehouse-Rail	1.51	1.13	50.4	11.8	0.55	1.24	3,368	3,369	1.19	339	340	—	58,411	58,411	0.28	8.68	24.6	61,030
Refrigerated Warehouse-No Rail	0.44	0.41	0.36	12.5	0.04	0.01	727	727	0.01	72.9	72.9	—	4,184	4,184	0.03	0.06	0.82	4,202
Refrigerated Warehouse-Rail	0.43	0.32	14.5	3.40	0.16	0.36	966	966	0.34	97.3	97.6	—	16,755	16,755	0.08	2.49	7.05	17,506
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	5.64	4.90	67.8	121	1.06	1.66	10,458	10,460	1.58	1,051	1,053	—	110,433	110,433	0.65	11.6	38.5	113,959
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	2.88	2.66	3.00	50.3	0.26	0.05	5,398	5,398	0.05	542	542	—	26,485	26,485	0.27	0.46	0.16	26,630

Unrefrigerated	1.43	1.06	55.6	12.0	0.55	1.24	3,368	3,369	1.19	339	340	—	58,439	58,439	0.27	8.69	0.64	61,036
Refrigerated Warehouse-No Rail	0.39	0.36	0.40	6.78	0.04	0.01	727	727	0.01	72.9	72.9	—	3,565	3,565	0.04	0.06	0.02	3,585
Refrigerated Warehouse-Rail	0.41	0.30	15.9	3.45	0.16	0.36	966	966	0.34	97.3	97.6	—	16,763	16,763	0.08	2.49	0.18	17,508
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	5.10	4.39	74.9	72.6	1.01	1.66	10,458	10,460	1.58	1,051	1,053	—	105,252	105,252	0.66	11.7	1.00	108,758
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.54	0.50	0.52	11.9	0.05	0.01	972	972	0.01	97.6	97.6	—	4,698	4,698	0.04	0.07	0.43	4,721
Unrefrigerated Warehouse-Rail	0.27	0.20	9.99	2.18	0.10	0.23	607	607	0.22	61.1	61.3	—	9,673	9,673	0.05	1.44	1.76	10,104
Refrigerated Warehouse-No Rail	0.07	0.07	0.07	1.60	0.01	< 0.005	131	131	< 0.005	13.1	13.1	—	632	632	0.01	0.01	0.06	636
Refrigerated Warehouse-Rail	0.08	0.06	2.87	0.62	0.03	0.06	174	174	0.06	17.5	17.6	—	2,775	2,775	0.01	0.41	0.50	2,898
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.96	0.83	13.4	16.3	0.19	0.30	1,884	1,884	0.29	189	190	—	17,777	17,777	0.11	1.93	2.75	18,359

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Unrefrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Refrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
undefined	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unrefrigerated	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Unrefrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Refrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
undefined	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Unrefrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Refrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
undefined	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.80	0.40	7.23	6.07	0.04	0.55	—	0.55	0.55	—	0.55	—	8,628	8,628	0.76	0.02	—	8,652
Unrefrigerated Warehouse-Rail	0.30	0.15	2.74	2.30	0.02	0.21	—	0.21	0.21	—	0.21	—	3,273	3,273	0.29	0.01	—	3,282
Refrigerated Warehouse-No Rail	0.11	0.05	0.95	0.80	0.01	0.07	—	0.07	0.07	—	0.07	—	1,139	1,139	0.10	< 0.005	—	1,142
Refrigerated Warehouse-Rail	0.08	0.04	0.77	0.65	< 0.005	0.06	—	0.06	0.06	—	0.06	—	921	921	0.08	< 0.005	—	923
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Total	1.29	0.64	11.7	9.83	0.07	0.89	—	0.89	0.89	—	0.89	—	13,960	13,960	1.24	0.03	—	13,999
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.80	0.40	7.23	6.07	0.04	0.55	—	0.55	0.55	—	0.55	—	8,628	8,628	0.76	0.02	—	8,652
Unrefrigerated Warehouse-Rail	0.30	0.15	2.74	2.30	0.02	0.21	—	0.21	0.21	—	0.21	—	3,273	3,273	0.29	0.01	—	3,282
Refrigerated Warehouse-No Rail	0.11	0.05	0.95	0.80	0.01	0.07	—	0.07	0.07	—	0.07	—	1,139	1,139	0.10	< 0.005	—	1,142
Refrigerated Warehouse-Rail	0.08	0.04	0.77	0.65	< 0.005	0.06	—	0.06	0.06	—	0.06	—	921	921	0.08	< 0.005	—	923
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	1.29	0.64	11.7	9.83	0.07	0.89	—	0.89	0.89	—	0.89	—	13,960	13,960	1.24	0.03	—	13,999
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.15	0.07	1.32	1.11	0.01	0.10	—	0.10	0.10	—	0.10	—	1,428	1,428	0.13	< 0.005	—	1,432
Unrefrigerated Warehouse-Rail	0.06	0.03	0.50	0.42	< 0.005	0.04	—	0.04	0.04	—	0.04	—	542	542	0.05	< 0.005	—	543

Refrigerated Warehouse-No	0.02	0.01	0.17	0.15	< 0.005	0.01	—	0.01	0.01	—	0.01	—	189	189	0.02	< 0.005	—	189
Refrigerated Warehouse-Rail	0.02	0.01	0.14	0.12	< 0.005	0.01	—	0.01	0.01	—	0.01	—	152	152	0.01	< 0.005	—	153
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.23	0.12	2.14	1.79	0.01	0.16	—	0.16	0.16	—	0.16	—	2,311	2,311	0.20	< 0.005	—	2,318

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	49.9	49.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	10.0	10.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	17.7	16.4	0.84	99.5	0.01	0.18	—	0.18	0.13	—	0.13	—	409	409	0.02	< 0.005	—	411
Total	77.6	76.3	0.84	99.5	0.01	0.18	—	0.18	0.13	—	0.13	—	409	409	0.02	< 0.005	—	411
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Consum Products	49.9	49.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	10.0	10.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	59.9	59.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	9.10	9.10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	1.83	1.83	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	2.39	2.21	0.11	13.4	< 0.005	0.02	—	0.02	0.02	—	0.02	—	50.1	50.1	< 0.005	< 0.005	—	50.3
Total	13.3	13.1	0.11	13.4	< 0.005	0.02	—	0.02	0.02	—	0.02	—	50.1	50.1	< 0.005	< 0.005	—	50.3

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	69.5	0.00	69.5	7.12	0.17	—	298

Unrefrig Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	26.4	0.00	26.4	2.70	0.06	—	113
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	9.35	0.00	9.35	0.96	0.02	—	40.1
Refrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	7.56	0.00	7.56	0.78	0.02	—	32.4
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	113	0.00	113	11.6	0.27	—	484
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	69.5	0.00	69.5	7.12	0.17	—	298
Unrefrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	26.4	0.00	26.4	2.70	0.06	—	113
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	9.35	0.00	9.35	0.96	0.02	—	40.1
Refrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	7.56	0.00	7.56	0.78	0.02	—	32.4
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	113	0.00	113	11.6	0.27	—	484

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	11.5	0.00	11.5	1.18	0.03	—	49.3
Unrefrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	4.36	0.00	4.36	0.45	0.01	—	18.7
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	1.55	0.00	1.55	0.16	< 0.005	—	6.64
Refrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	1.25	0.00	1.25	0.13	< 0.005	—	5.37
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	18.7	0.00	18.7	1.91	0.05	—	80.1

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	715	0.00	715	71.4	0.00	—	2,500

Unrefrig Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	271	0.00	271	27.1	0.00	—	948
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	96.2	0.00	96.2	9.61	0.00	—	337
Refrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	77.7	0.00	77.7	7.77	0.00	—	272
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1,160	0.00	1,160	116	0.00	—	4,057
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	715	0.00	715	71.4	0.00	—	2,500
Unrefrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	271	0.00	271	27.1	0.00	—	948
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	96.2	0.00	96.2	9.61	0.00	—	337
Refrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	77.7	0.00	77.7	7.77	0.00	—	272
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1,160	0.00	1,160	116	0.00	—	4,057

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	118	0.00	118	11.8	0.00	—	414
Unrefrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	44.9	0.00	44.9	4.48	0.00	—	157
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	15.9	0.00	15.9	1.59	0.00	—	55.7
Refrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	12.9	0.00	12.9	1.29	0.00	—	45.0
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	192	0.00	192	19.2	0.00	—	672

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5,060	5,060

Refriger Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4,090	4,090
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9,150	9,150
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5,060	5,060
Refrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4,090	4,090
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9,150	9,150
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	838	838
Refrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	677	677
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,515	1,515

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Rough Terrain Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Rough Terrain Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Rough Terrain Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Emergency	2.70	2.46	6.88	6.28	0.01	0.36	0.00	0.36	0.36	0.00	0.36	0.00	1,259	1,259	0.05	0.01	0.00	1,263
Total	2.70	2.46	6.88	6.28	0.01	0.36	0.00	0.36	0.36	0.00	0.36	0.00	1,259	1,259	0.05	0.01	0.00	1,263
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	2.70	2.46	6.88	6.28	0.01	0.36	0.00	0.36	0.36	0.00	0.36	0.00	1,259	1,259	0.05	0.01	0.00	1,263
Total	2.70	2.46	6.88	6.28	0.01	0.36	0.00	0.36	0.36	0.00	0.36	0.00	1,259	1,259	0.05	0.01	0.00	1,263
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.07	0.06	0.17	0.16	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	28.6	28.6	< 0.005	< 0.005	0.00	28.7
Total	0.07	0.06	0.17	0.16	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	28.6	28.6	< 0.005	< 0.005	0.00	28.7

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Unrefrigerated Warehouse-No Rail	1,975	1,975	1,975	720,760	48,091	48,091	48,091	17,553,208
Unrefrigerated Warehouse-Rail	749	749	749	273,392	29,961	29,961	29,961	10,935,664
Refrigerated Warehouse-No Rail	266	266	266	97,017	6,473	6,473	6,473	2,362,740
Refrigerated Warehouse-Rail	215	215	215	78,421	8,594	8,594	8,594	3,136,840
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	3,433,239	1,144,413	686,648

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	270

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Unrefrigerated Warehouse-No Rail	15,817,809	0.00	0.0000	0.0000	26,921,002
Unrefrigerated Warehouse-Rail	5,999,858	0.00	0.0000	0.0000	10,211,413
Refrigerated Warehouse-No Rail	4,055,103	0.00	0.0000	0.0000	3,554,675
Refrigerated Warehouse-Rail	3,277,820	0.00	0.0000	0.0000	2,873,315
Parking Lot	10,025,058	0.00	0.0000	0.0000	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Unrefrigerated Warehouse-No Rail	36,255,066	1,604,620

Unrefrigerated Warehouse-Rail	13,751,921	608,649
Refrigerated Warehouse-No Rail	4,880,094	215,989
Refrigerated Warehouse-Rail	3,944,669	174,588
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Unrefrigerated Warehouse-No Rail	1,326	—
Unrefrigerated Warehouse-Rail	503	—
Refrigerated Warehouse-No Rail	178	—
Refrigerated Warehouse-Rail	144	—
Parking Lot	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Refrigerated Warehouse-No Rail	Cold storage	R-404A	3,922	7.50	7.50	7.50	25.0
Refrigerated Warehouse-Rail	Cold storage	R-404A	3,922	7.50	7.50	7.50	25.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Forklifts	Electric	Average	275	24.0	200	0.20

Rough Terrain Forklifts	Electric	Average	8.00	24.0	200	0.40

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
Emergency Generator	Diesel	3.00	1.00	50.0	500	0.73

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	32.8	annual days of extreme heat
Extreme Precipitation	0.00	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.19	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A

Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	11.6
AQ-PM	19.1
AQ-DPM	9.09
Drinking Water	30.6
Lead Risk Housing	50.8
Pesticides	90.5
Toxic Releases	7.58
Traffic	3.06
Effect Indicators	—
CleanUp Sites	74.2
Groundwater	77.9
Haz Waste Facilities/Generators	93.2
Impaired Water Bodies	100.0
Solid Waste	86.5
Sensitive Population	—
Asthma	87.6
Cardio-vascular	83.2
Low Birth Weights	26.9
Socioeconomic Factor Indicators	—
Education	82.7
Housing	51.4
Linguistic	88.8
Poverty	94.9
Unemployment	99.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	16.66880534
Employed	7.173104068
Median HI	5.299627871
Education	—
Bachelor's or higher	5.017323239
High school enrollment	16.8741178
Preschool enrollment	68.89516233
Transportation	—
Auto Access	18.40112922
Active commuting	51.10997049
Social	—
2-parent households	13.28114975
Voting	16.79712563
Neighborhood	—
Alcohol availability	70.25535737
Park access	33.85089183
Retail density	4.311561658
Supermarket access	49.58295907
Tree canopy	0.782753753
Housing	—
Homeownership	38.3036058
Housing habitability	30.96368536
Low-inc homeowner severe housing cost burden	26.76761196
Low-inc renter severe housing cost burden	52.89362248

Uncrowded housing	38.58591043
Health Outcomes	—
Insured adults	21.00603105
Arthritis	0.0
Asthma ER Admissions	30.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	41.7
Cognitively Disabled	50.3
Physically Disabled	19.5
Heart Attack ER Admissions	46.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	54.3
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0

Children	14.1
Elderly	42.0
English Speaking	18.7
Foreign-born	65.3
Outdoor Workers	5.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	85.8
Traffic Density	4.9
Traffic Access	23.0
Other Indices	—
Hardship	92.9
Other Decision Support	—
2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	82.0
Healthy Places Index Score for Project Location (b)	11.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Land use data are based on applicant-provided buildout assumptions.
Operations: Vehicle Data	Trip rates are based on ITE Land Use Code 154.
Operations: Landscape Equipment	Assumed 270 summer days for desert region.
Operations: Off-Road Equipment	Assumed forklifts and yard trucks (modeled as rough terrain forklifts) as part of project operations.
Operations: Road Dust	All roads used by future developments projects within the Specific Plan Area would be required to be paved. Per ICAPCD guidance a value of 85% paved is assumed in the modeling to account for the high levels of entrained dust generated from vehicle travel on paved roadways in the region.
Operations: Fleet Mix	Fleet mix adjusted for passenger vehicles (no-rail land uses) and trucks (rail land uses).
Operations: Emergency Generators and Fire Pumps	Assumed 3 back-up generators operating 1 hour/day and 50 hours/year for maintenance and testing.
Operations: Water and Waste Water	Water data are based on applicant-provided calculations for the land use.
Characteristics: Utility Information	GHG intensity factors adjusted per RPS requirements.

Lithium Valley Operation - Phase 2 - Manufacturing of Green Industrial Equipment Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Lithium Valley Operation - Phase 2 - Manufacturing of Green Industrial Equipment
Operational Year	2045
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	4.80
Location	33.18829759139308, -115.6026869228474
County	Imperial
City	Unincorporated
Air District	Imperial County APCD
Air Basin	Salton Sea
TAZ	5600
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Manufacturing	1,078	1000sqft	770	1,078,330	539,166	—	—	—
Parking Lot	5,392	1000sqft	124	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	66.0	62.2	45.9	442	1.27	1.67	19,133	19,134	1.61	1,921	1,923	1,014	135,251	136,265	105	5.45	315	140,834
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	54.5	51.4	49.5	258	1.13	1.59	19,133	19,134	1.55	1,921	1,923	1,014	120,484	121,498	105	5.63	282	126,088
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	52.5	49.8	34.1	247	0.84	1.25	13,091	13,092	1.21	1,315	1,316	1,014	90,800	91,814	105	4.08	291	95,933
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	9.59	9.10	6.23	45.1	0.15	0.23	2,389	2,389	0.22	240	240	168	15,033	15,201	17.3	0.68	48.2	15,883

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	26.5	24.1	31.5	383	1.21	0.63	19,133	19,133	0.59	1,921	1,922	—	122,993	122,993	2.10	4.71	34.2	124,482

Area	36.6	35.9	0.39	46.9	< 0.005	0.08	—	0.08	0.06	—	0.06	—	193	193	0.01	< 0.005	—	194
Energy	1.03	0.52	9.41	7.90	0.06	0.72	—	0.72	0.72	—	0.72	—	11,226	11,226	0.99	0.02	—	11,257
Water	—	—	—	—	—	—	—	—	—	—	—	293	0.00	293	30.0	0.71	—	1,257
Waste	—	—	—	—	—	—	—	—	—	—	—	721	0.00	721	72.0	0.00	—	2,521
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	281	281
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	1.80	1.64	4.59	4.18	0.01	0.24	0.00	0.24	0.24	0.00	0.24	0.00	840	840	0.03	0.01	0.00	842
Total	66.0	62.2	45.9	442	1.27	1.67	19,133	19,134	1.61	1,921	1,923	1,014	135,251	136,265	105	5.45	315	140,834
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	23.4	21.0	35.5	246	1.06	0.63	19,133	19,133	0.59	1,921	1,922	—	108,418	108,418	2.12	4.89	0.89	109,929
Area	28.2	28.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	1.03	0.52	9.41	7.90	0.06	0.72	—	0.72	0.72	—	0.72	—	11,226	11,226	0.99	0.02	—	11,257
Water	—	—	—	—	—	—	—	—	—	—	—	293	0.00	293	30.0	0.71	—	1,257
Waste	—	—	—	—	—	—	—	—	—	—	—	721	0.00	721	72.0	0.00	—	2,521
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	281	281
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	1.80	1.64	4.59	4.18	0.01	0.24	0.00	0.24	0.24	0.00	0.24	0.00	840	840	0.03	0.01	0.00	842
Total	54.5	51.4	49.5	258	1.13	1.59	19,133	19,134	1.55	1,921	1,923	1,014	120,484	121,498	105	5.63	282	126,088
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	16.9	15.2	23.8	204	0.78	0.44	13,091	13,091	0.41	1,315	1,315	—	79,316	79,316	1.45	3.34	10.2	80,358
Area	34.4	33.9	0.29	34.7	< 0.005	0.06	—	0.06	0.05	—	0.05	—	143	143	0.01	< 0.005	—	143
Energy	1.03	0.52	9.41	7.90	0.06	0.72	—	0.72	0.72	—	0.72	—	11,226	11,226	0.99	0.02	—	11,257
Water	—	—	—	—	—	—	—	—	—	—	—	293	0.00	293	30.0	0.71	—	1,257
Waste	—	—	—	—	—	—	—	—	—	—	—	721	0.00	721	72.0	0.00	—	2,521

Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	281	281
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	0.25	0.22	0.63	0.57	< 0.005	0.03	0.00	0.03	0.03	0.00	0.03	0.00	115	115	< 0.005	< 0.005	0.00	115
Total	52.5	49.8	34.1	247	0.84	1.25	13,091	13,092	1.21	1,315	1,316	1,014	90,800	91,814	105	4.08	291	95,933
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	3.08	2.77	4.34	37.2	0.14	0.08	2,389	2,389	0.08	240	240	—	13,132	13,132	0.24	0.55	1.70	13,304
Area	6.28	6.19	0.05	6.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	23.6	23.6	< 0.005	< 0.005	—	23.7
Energy	0.19	0.09	1.72	1.44	0.01	0.13	—	0.13	0.13	—	0.13	—	1,859	1,859	0.16	< 0.005	—	1,864
Water	—	—	—	—	—	—	—	—	—	—	—	48.5	0.00	48.5	4.97	0.12	—	208
Waste	—	—	—	—	—	—	—	—	—	—	—	119	0.00	119	11.9	0.00	—	417
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	46.5	46.5
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	0.05	0.04	0.11	0.10	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	19.0	19.0	< 0.005	< 0.005	0.00	19.1
Total	9.59	9.10	6.23	45.1	0.15	0.23	2,389	2,389	0.22	240	240	168	15,033	15,201	17.3	0.68	48.2	15,883

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Manufacturing	26.5	24.1	31.5	383	1.21	0.63	19,133	19,133	0.59	1,921	1,922	—	122,993	122,993	2.10	4.71	34.2	124,482
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	26.5	24.1	31.5	383	1.21	0.63	19,133	19,133	0.59	1,921	1,922	—	122,993	122,993	2.10	4.71	34.2	124,482
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	23.4	21.0	35.5	246	1.06	0.63	19,133	19,133	0.59	1,921	1,922	—	108,418	108,418	2.12	4.89	0.89	109,929
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	23.4	21.0	35.5	246	1.06	0.63	19,133	19,133	0.59	1,921	1,922	—	108,418	108,418	2.12	4.89	0.89	109,929
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	3.08	2.77	4.34	37.2	0.14	0.08	2,389	2,389	0.08	240	240	—	13,132	13,132	0.24	0.55	1.70	13,304
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	3.08	2.77	4.34	37.2	0.14	0.08	2,389	2,389	0.08	240	240	—	13,132	13,132	0.24	0.55	1.70	13,304

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

undefine	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
undefined	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
undefined	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	1.03	0.52	9.41	7.90	0.06	0.72	—	0.72	0.72	—	0.72	—	11,226	11,226	0.99	0.02	—	11,257
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	1.03	0.52	9.41	7.90	0.06	0.72	—	0.72	0.72	—	0.72	—	11,226	11,226	0.99	0.02	—	11,257

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	1.03	0.52	9.41	7.90	0.06	0.72	—	0.72	0.72	—	0.72	—	11,226	11,226	0.99	0.02	—	11,257
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	1.03	0.52	9.41	7.90	0.06	0.72	—	0.72	0.72	—	0.72	—	11,226	11,226	0.99	0.02	—	11,257
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	0.19	0.09	1.72	1.44	0.01	0.13	—	0.13	0.13	—	0.13	—	1,859	1,859	0.16	< 0.005	—	1,864
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.19	0.09	1.72	1.44	0.01	0.13	—	0.13	0.13	—	0.13	—	1,859	1,859	0.16	< 0.005	—	1,864

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	23.5	23.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	4.73	4.73	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	8.35	7.71	0.39	46.9	< 0.005	0.08	—	0.08	0.06	—	0.06	—	193	193	0.01	< 0.005	—	194

Total	36.6	35.9	0.39	46.9	< 0.005	0.08	—	0.08	0.06	—	0.06	—	193	193	0.01	< 0.005	—	194
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	23.5	23.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	4.73	4.73	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	28.2	28.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	4.29	4.29	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.86	0.86	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	1.13	1.04	0.05	6.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	23.6	23.6	< 0.005	< 0.005	—	23.7
Total	6.28	6.19	0.05	6.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	23.6	23.6	< 0.005	< 0.005	—	23.7

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	293	0.00	293	30.0	0.71	—	1,257
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	293	0.00	293	30.0	0.71	—	1,257
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	293	0.00	293	30.0	0.71	—	1,257
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	293	0.00	293	30.0	0.71	—	1,257
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	48.5	0.00	48.5	4.97	0.12	—	208
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	48.5	0.00	48.5	4.97	0.12	—	208

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	721	0.00	721	72.0	0.00	—	2,521

Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	721	0.00	721	72.0	0.00	—	2,521
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	721	0.00	721	72.0	0.00	—	2,521
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	721	0.00	721	72.0	0.00	—	2,521
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	119	0.00	119	11.9	0.00	—	417
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	119	0.00	119	11.9	0.00	—	417

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	281	281
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	281	281
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Manufac	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	281	281
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	281	281
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	46.5	46.5
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	46.5	46.5

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	1.80	1.64	4.59	4.18	0.01	0.24	0.00	0.24	0.24	0.00	0.24	0.00	840	840	0.03	0.01	0.00	842
Total	1.80	1.64	4.59	4.18	0.01	0.24	0.00	0.24	0.24	0.00	0.24	0.00	840	840	0.03	0.01	0.00	842
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	1.80	1.64	4.59	4.18	0.01	0.24	0.00	0.24	0.24	0.00	0.24	0.00	840	840	0.03	0.01	0.00	842
Total	1.80	1.64	4.59	4.18	0.01	0.24	0.00	0.24	0.24	0.00	0.24	0.00	840	840	0.03	0.01	0.00	842
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.05	0.04	0.11	0.10	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	19.0	19.0	< 0.005	< 0.005	0.00	19.1
Total	0.05	0.04	0.11	0.10	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	19.0	19.0	< 0.005	< 0.005	0.00	19.1

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Manufacturing	5,122	8,368	6,632	2,117,517	104,330	170,442	135,080	43,131,165
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	1,617,495	539,165	323,500

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	270

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Manufacturing	32,753,655	0.00	0.0000	0.0000	35,029,122
Parking Lot	4,723,094	0.00	0.0000	0.0000	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Manufacturing	152,900,635	6,767,276
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Manufacturing	1,337	—
Parking Lot	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Manufacturing	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Forklifts	Electric	Average	129	8.00	200	0.20

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
Emergency Generator	Diesel	2.00	1.00	50.0	500	0.73

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	32.8	annual days of extreme heat
Extreme Precipitation	0.00	annual days with precipitation above 20 mm

Sea Level Rise	—	meters of inundation depth
Wildfire	0.19	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A

Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	11.6
AQ-PM	19.1
AQ-DPM	9.09
Drinking Water	30.6
Lead Risk Housing	50.8
Pesticides	90.5
Toxic Releases	7.58
Traffic	3.06
Effect Indicators	—

CleanUp Sites	74.2
Groundwater	77.9
Haz Waste Facilities/Generators	93.2
Impaired Water Bodies	100.0
Solid Waste	86.5
Sensitive Population	—
Asthma	87.6
Cardio-vascular	83.2
Low Birth Weights	26.9
Socioeconomic Factor Indicators	—
Education	82.7
Housing	51.4
Linguistic	88.8
Poverty	94.9
Unemployment	99.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	16.66880534
Employed	7.173104068
Median HI	5.299627871
Education	—
Bachelor's or higher	5.017323239
High school enrollment	16.8741178
Preschool enrollment	68.89516233
Transportation	—

Auto Access	18.40112922
Active commuting	51.10997049
Social	—
2-parent households	13.28114975
Voting	16.79712563
Neighborhood	—
Alcohol availability	70.25535737
Park access	33.85089183
Retail density	4.311561658
Supermarket access	49.58295907
Tree canopy	0.782753753
Housing	—
Homeownership	38.3036058
Housing habitability	30.96368536
Low-inc homeowner severe housing cost burden	26.76761196
Low-inc renter severe housing cost burden	52.89362248
Uncrowded housing	38.58591043
Health Outcomes	—
Insured adults	21.00603105
Arthritis	0.0
Asthma ER Admissions	30.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	41.7

Cognitively Disabled	50.3
Physically Disabled	19.5
Heart Attack ER Admissions	46.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	54.3
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	14.1
Elderly	42.0
English Speaking	18.7
Foreign-born	65.3
Outdoor Workers	5.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	85.8
Traffic Density	4.9
Traffic Access	23.0
Other Indices	—
Hardship	92.9
Other Decision Support	—

2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	82.0
Healthy Places Index Score for Project Location (b)	11.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Land use data are based on applicant-provided buildout assumptions.
Operations: Vehicle Data	Trip rates are based on ITE Land Use Code 140.
Operations: Landscape Equipment	Assumed 270 summer days for desert region.
Operations: Emergency Generators and Fire Pumps	Assumed 2 back-up generators operating 1 hour/day and 50 hours/year for maintenance and testing.

Operations: Road Dust	All roads used by future developments projects within the Specific Plan Area would be required to be paved. Per ICAPCD guidance a value of 85% paved is assumed in the modeling to account for the high levels of entrained dust generated from vehicle travel on paved roadways in the region.
Operations: Water and Waste Water	Water data are based on applicant-provided calculations for the land use.
Characteristics: Utility Information	GHG intensity factors adjusted per RPS requirements.
Operations: Off-Road Equipment	Electric forklifts assumed as part of project operations.

Lithium Valley Operation - Phase 2 - Mineral Recovery, Processing, and Production Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Lithium Valley Operation - Phase 2 - Mineral Recovery, Processing, and Production
Operational Year	2045
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	4.80
Location	33.18829759139308, -115.6026869228474
County	Imperial
City	Unincorporated
Air District	Imperial County APCD
Air Basin	Salton Sea
TAZ	5600
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
General Heavy Industry	4,067	1000sqft	3,198	4,067,466	813,493	—	—	—
Parking Lot	8,135	1000sqft	187	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	171	164	120	472	1.01	5.51	11,439	11,445	5.41	1,149	1,154	7,939	123,996	131,935	812	15.7	1,079	157,995
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	138	133	121	214	0.92	5.20	11,439	11,444	5.18	1,149	1,154	7,939	114,555	122,494	812	15.8	1,059	148,564
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	144	139	59.6	287	0.69	3.48	7,802	7,805	3.41	783	787	7,939	91,164	99,104	812	14.8	1,065	124,872
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	26.2	25.3	10.9	52.4	0.13	0.64	1,424	1,424	0.62	143	144	1,314	15,093	16,408	134	2.45	176	20,674

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	15.9	14.4	18.8	229	0.72	0.38	11,439	11,439	0.36	1,149	1,149	—	73,535	73,535	1.26	2.81	20.5	74,425

Area	136	133	1.49	177	0.01	0.31	—	0.31	0.24	—	0.24	—	727	727	0.03	0.01	—	730
Energy	3.90	1.95	35.5	29.8	0.21	2.70	—	2.70	2.70	—	2.70	—	42,346	42,346	3.75	0.08	—	42,463
Water	—	—	—	—	—	—	—	—	—	—	—	5,221	0.00	5,221	535	12.7	—	22,395
Waste	—	—	—	—	—	—	—	—	—	—	—	2,718	0.00	2,718	272	0.00	—	9,510
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,059	1,059
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	15.9	14.4	64.6	36.8	0.07	2.12	0.00	2.12	2.12	0.00	2.12	0.00	7,388	7,388	0.30	0.06	0.00	7,412
Total	171	164	120	472	1.01	5.51	11,439	11,445	5.41	1,149	1,154	7,939	123,996	131,935	812	15.7	1,079	157,995
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	14.0	12.6	21.2	147	0.64	0.38	11,439	11,439	0.36	1,149	1,149	—	64,821	64,821	1.27	2.92	0.53	65,725
Area	104	104	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	3.90	1.95	35.5	29.8	0.21	2.70	—	2.70	2.70	—	2.70	—	42,346	42,346	3.75	0.08	—	42,463
Water	—	—	—	—	—	—	—	—	—	—	—	5,221	0.00	5,221	535	12.7	—	22,395
Waste	—	—	—	—	—	—	—	—	—	—	—	2,718	0.00	2,718	272	0.00	—	9,510
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,059	1,059
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	15.9	14.4	64.6	36.8	0.07	2.12	0.00	2.12	2.12	0.00	2.12	0.00	7,388	7,388	0.30	0.06	0.00	7,412
Total	138	133	121	214	0.92	5.20	11,439	11,444	5.18	1,149	1,154	7,939	114,555	122,494	812	15.8	1,059	148,564
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	10.0	9.04	14.2	121	0.46	0.26	7,802	7,802	0.25	783	784	—	47,268	47,268	0.86	1.99	6.10	47,889
Area	127	126	1.10	131	0.01	0.23	—	0.23	0.18	—	0.18	—	538	538	0.02	< 0.005	—	540
Energy	3.90	1.95	35.5	29.8	0.21	2.70	—	2.70	2.70	—	2.70	—	42,346	42,346	3.75	0.08	—	42,463
Water	—	—	—	—	—	—	—	—	—	—	—	5,221	0.00	5,221	535	12.7	—	22,395
Waste	—	—	—	—	—	—	—	—	—	—	—	2,718	0.00	2,718	272	0.00	—	9,510

Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,059	1,059
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	2.17	1.98	8.85	5.04	0.01	0.29	0.00	0.29	0.29	0.00	0.29	0.00	1,012	1,012	0.04	0.01	0.00	1,015
Total	144	139	59.6	287	0.69	3.48	7,802	7,805	3.41	783	787	7,939	91,164	99,104	812	14.8	1,065	124,872
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.83	1.65	2.59	22.2	0.08	0.05	1,424	1,424	0.04	143	143	—	7,826	7,826	0.14	0.33	1.01	7,929
Area	23.3	22.9	0.20	23.9	< 0.005	0.04	—	0.04	0.03	—	0.03	—	89.1	89.1	< 0.005	< 0.005	—	89.4
Energy	0.71	0.36	6.48	5.44	0.04	0.49	—	0.49	0.49	—	0.49	—	7,011	7,011	0.62	0.01	—	7,030
Water	—	—	—	—	—	—	—	—	—	—	—	864	0.00	864	88.6	2.11	—	3,708
Waste	—	—	—	—	—	—	—	—	—	—	—	450	0.00	450	45.0	0.00	—	1,575
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	175	175
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	0.40	0.36	1.61	0.92	< 0.005	0.05	0.00	0.05	0.05	0.00	0.05	0.00	168	168	0.01	< 0.005	0.00	168
Total	26.2	25.3	10.9	52.4	0.13	0.64	1,424	1,424	0.62	143	144	1,314	15,093	16,408	134	2.45	176	20,674

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	15.9	14.4	18.8	229	0.72	0.38	11,439	11,439	0.36	1,149	1,149	—	73,535	73,535	1.26	2.81	20.5	74,425
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	15.9	14.4	18.8	229	0.72	0.38	11,439	11,439	0.36	1,149	1,149	—	73,535	73,535	1.26	2.81	20.5	74,425
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	14.0	12.6	21.2	147	0.64	0.38	11,439	11,439	0.36	1,149	1,149	—	64,821	64,821	1.27	2.92	0.53	65,725
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	14.0	12.6	21.2	147	0.64	0.38	11,439	11,439	0.36	1,149	1,149	—	64,821	64,821	1.27	2.92	0.53	65,725
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	1.83	1.65	2.59	22.2	0.08	0.05	1,424	1,424	0.04	143	143	—	7,826	7,826	0.14	0.33	1.01	7,929
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	1.83	1.65	2.59	22.2	0.08	0.05	1,424	1,424	0.04	143	143	—	7,826	7,826	0.14	0.33	1.01	7,929

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
undefined	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
undefined	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
undefined	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	3.90	1.95	35.5	29.8	0.21	2.70	—	2.70	2.70	—	2.70	—	42,346	42,346	3.75	0.08	—	42,463
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	3.90	1.95	35.5	29.8	0.21	2.70	—	2.70	2.70	—	2.70	—	42,346	42,346	3.75	0.08	—	42,463
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	3.90	1.95	35.5	29.8	0.21	2.70	—	2.70	2.70	—	2.70	—	42,346	42,346	3.75	0.08	—	42,463
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	3.90	1.95	35.5	29.8	0.21	2.70	—	2.70	2.70	—	2.70	—	42,346	42,346	3.75	0.08	—	42,463
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.71	0.36	6.48	5.44	0.04	0.49	—	0.49	0.49	—	0.49	—	7,011	7,011	0.62	0.01	—	7,030
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.71	0.36	6.48	5.44	0.04	0.49	—	0.49	0.49	—	0.49	—	7,011	7,011	0.62	0.01	—	7,030

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Consum Products	87.7	87.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	16.4	16.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	31.5	29.1	1.49	177	0.01	0.31	—	0.31	0.24	—	0.24	—	727	727	0.03	0.01	—	730
Total	136	133	1.49	177	0.01	0.31	—	0.31	0.24	—	0.24	—	727	727	0.03	0.01	—	730
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	87.7	87.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	16.4	16.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	104	104	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	16.0	16.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	3.00	3.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	4.25	3.93	0.20	23.9	< 0.005	0.04	—	0.04	0.03	—	0.03	—	89.1	89.1	< 0.005	< 0.005	—	89.4
Total	23.3	22.9	0.20	23.9	< 0.005	0.04	—	0.04	0.03	—	0.03	—	89.1	89.1	< 0.005	< 0.005	—	89.4

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	5,221	0.00	5,221	535	12.7	—	22,395
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	5,221	0.00	5,221	535	12.7	—	22,395
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	5,221	0.00	5,221	535	12.7	—	22,395
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	5,221	0.00	5,221	535	12.7	—	22,395
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	864	0.00	864	88.6	2.11	—	3,708
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	864	0.00	864	88.6	2.11	—	3,708

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	2,718	0.00	2,718	272	0.00	—	9,510
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	2,718	0.00	2,718	272	0.00	—	9,510
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	2,718	0.00	2,718	272	0.00	—	9,510
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	2,718	0.00	2,718	272	0.00	—	9,510
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	450	0.00	450	45.0	0.00	—	1,575
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	450	0.00	450	45.0	0.00	—	1,575

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,059	1,059
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,059	1,059
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,059	1,059
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,059	1,059
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	175	175
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	175	175

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	15.9	14.4	64.6	36.8	0.07	2.12	0.00	2.12	2.12	0.00	2.12	0.00	7,388	7,388	0.30	0.06	0.00	7,412
Total	15.9	14.4	64.6	36.8	0.07	2.12	0.00	2.12	2.12	0.00	2.12	0.00	7,388	7,388	0.30	0.06	0.00	7,412
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	15.9	14.4	64.6	36.8	0.07	2.12	0.00	2.12	2.12	0.00	2.12	0.00	7,388	7,388	0.30	0.06	0.00	7,412
Total	15.9	14.4	64.6	36.8	0.07	2.12	0.00	2.12	2.12	0.00	2.12	0.00	7,388	7,388	0.30	0.06	0.00	7,412
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Emerge Generator	0.40	0.36	1.61	0.92	< 0.005	0.05	0.00	0.05	0.05	0.00	0.05	0.00	168	168	0.01	< 0.005	0.00	168
Total	0.40	0.36	1.61	0.92	< 0.005	0.05	0.00	0.05	0.05	0.00	0.05	0.00	168	168	0.01	< 0.005	0.00	168

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
General Heavy Industry	3,051	5,003	3,945	1,261,931	62,137	101,905	80,364	25,703,961
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	6,101,199	2,033,733	488,096

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	270

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)

General Heavy Industry	123,546,945	0.00	0.0000	0.0000	132,130,018
Parking Lot	7,126,200	0.00	0.0000	0.0000	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
General Heavy Industry	2,724,607,626	48,235,604
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
General Heavy Industry	5,044	—
Parking Lot	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
General Heavy Industry	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

Forklifts	Electric	Average	10.0	8.00	82.0	0.20

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
Emergency Generator	Diesel	8.00	1.00	50.0	1,100	0.73

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	32.8	annual days of extreme heat
Extreme Precipitation	0.00	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.19	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A

Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	11.6
AQ-PM	19.1
AQ-DPM	9.09
Drinking Water	30.6
Lead Risk Housing	50.8
Pesticides	90.5
Toxic Releases	7.58
Traffic	3.06
Effect Indicators	—
CleanUp Sites	74.2
Groundwater	77.9
Haz Waste Facilities/Generators	93.2
Impaired Water Bodies	100.0
Solid Waste	86.5
Sensitive Population	—
Asthma	87.6
Cardio-vascular	83.2
Low Birth Weights	26.9
Socioeconomic Factor Indicators	—
Education	82.7
Housing	51.4
Linguistic	88.8
Poverty	94.9
Unemployment	99.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	16.66880534
Employed	7.173104068
Median HI	5.299627871
Education	—
Bachelor's or higher	5.017323239
High school enrollment	16.8741178
Preschool enrollment	68.89516233
Transportation	—
Auto Access	18.40112922
Active commuting	51.10997049
Social	—
2-parent households	13.28114975
Voting	16.79712563
Neighborhood	—
Alcohol availability	70.25535737
Park access	33.85089183
Retail density	4.311561658
Supermarket access	49.58295907
Tree canopy	0.782753753
Housing	—
Homeownership	38.3036058
Housing habitability	30.96368536
Low-inc homeowner severe housing cost burden	26.76761196
Low-inc renter severe housing cost burden	52.89362248

Uncrowded housing	38.58591043
Health Outcomes	—
Insured adults	21.00603105
Arthritis	0.0
Asthma ER Admissions	30.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	41.7
Cognitively Disabled	50.3
Physically Disabled	19.5
Heart Attack ER Admissions	46.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	54.3
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0

Children	14.1
Elderly	42.0
English Speaking	18.7
Foreign-born	65.3
Outdoor Workers	5.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	85.8
Traffic Density	4.9
Traffic Access	23.0
Other Indices	—
Hardship	92.9
Other Decision Support	—
2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	82.0
Healthy Places Index Score for Project Location (b)	11.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Land use data are based on applicant-provided buildout assumptions.
Operations: Vehicle Data	Custom trip rates are provided by the applicant.
Operations: Landscape Equipment	Assumed 270 summer days for desert region.
Operations: Emergency Generators and Fire Pumps	Assumed 8 back-up generators operating 1 hour/day and 50 hours/year for maintenance and testing.
Operations: Road Dust	All roads used by future developments projects within the Specific Plan Area would be required to be paved. Per ICAPCD guidance a value of 85% paved is assumed in the modeling to account for the high levels of entrained dust generated from vehicle travel on paved roadways in the region.
Operations: Water and Waste Water	Water data are based on applicant-provided calculations for the land use.
Operations: Off-Road Equipment	Assumed 10 electric forklifts as part of project operations.
Characteristics: Utility Information	GHG intensity factors adjusted per RPS requirements.

Lithium Valley Operation - Phase 2 - Outdoor Storage of Trucks, Trailers, Shipping Containers Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Lithium Valley Operation - Phase 2 - Outdoor Storage of Trucks, Trailers, Shipping Containers
Operational Year	2045
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	4.80
Location	33.18829759139308, -115.6026869228474
County	Imperial
City	Unincorporated
Air District	Imperial County APCD
Air Basin	Salton Sea
TAZ	5600
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Parking Lot	96.8	Acre	96.8	0.00	0.00	1,405,629	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.24	1.20	0.51	6.20	0.02	0.01	310	310	0.01	31.1	31.1	98.7	1,992	2,091	10.2	0.32	0.55	2,439
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.19	1.15	0.57	3.98	0.02	0.01	310	310	0.01	31.1	31.1	98.7	1,756	1,855	10.2	0.32	0.01	2,204
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.21	1.17	0.56	4.76	0.02	0.01	306	306	0.01	30.7	30.7	98.7	1,853	1,952	10.2	0.32	0.24	2,301
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.22	0.21	0.10	0.87	< 0.005	< 0.005	55.8	55.8	< 0.005	5.60	5.61	16.3	307	323	1.68	0.05	0.04	381

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.43	0.39	0.51	6.20	0.02	0.01	310	310	0.01	31.1	31.1	—	1,992	1,992	0.03	0.08	0.55	2,016

Area	0.81	0.81	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	98.7	0.00	98.7	10.1	0.24	—	423
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	1.24	1.20	0.51	6.20	0.02	0.01	310	310	0.01	31.1	31.1	98.7	1,992	2,091	10.2	0.32	0.55	2,439
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.38	0.34	0.57	3.98	0.02	0.01	310	310	0.01	31.1	31.1	—	1,756	1,756	0.03	0.08	0.01	1,781
Area	0.81	0.81	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	98.7	0.00	98.7	10.1	0.24	—	423
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	1.19	1.15	0.57	3.98	0.02	0.01	310	310	0.01	31.1	31.1	98.7	1,756	1,855	10.2	0.32	0.01	2,204
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.39	0.35	0.56	4.76	0.02	0.01	306	306	0.01	30.7	30.7	—	1,853	1,853	0.03	0.08	0.24	1,877
Area	0.81	0.81	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	98.7	0.00	98.7	10.1	0.24	—	423
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	1.21	1.17	0.56	4.76	0.02	0.01	306	306	0.01	30.7	30.7	98.7	1,853	1,952	10.2	0.32	0.24	2,301
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.07	0.06	0.10	0.87	< 0.005	< 0.005	55.8	55.8	< 0.005	5.60	5.61	—	307	307	0.01	0.01	0.04	311
Area	0.15	0.15	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	16.3	0.00	16.3	1.67	0.04	—	70.1
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	0.22	0.21	0.10	0.87	< 0.005	< 0.005	55.8	55.8	< 0.005	5.60	5.61	16.3	307	323	1.68	0.05	0.04	381

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	0.43	0.39	0.51	6.20	0.02	0.01	310	310	0.01	31.1	31.1	—	1,992	1,992	0.03	0.08	0.55	2,016
Total	0.43	0.39	0.51	6.20	0.02	0.01	310	310	0.01	31.1	31.1	—	1,992	1,992	0.03	0.08	0.55	2,016
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	0.38	0.34	0.57	3.98	0.02	0.01	310	310	0.01	31.1	31.1	—	1,756	1,756	0.03	0.08	0.01	1,781
Total	0.38	0.34	0.57	3.98	0.02	0.01	310	310	0.01	31.1	31.1	—	1,756	1,756	0.03	0.08	0.01	1,781
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	0.07	0.06	0.10	0.87	< 0.005	< 0.005	55.8	55.8	< 0.005	5.60	5.61	—	307	307	0.01	0.01	0.04	311
Total	0.07	0.06	0.10	0.87	< 0.005	< 0.005	55.8	55.8	< 0.005	5.60	5.61	—	307	307	0.01	0.01	0.04	311

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.33	0.33	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.48	0.48	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.81	0.81	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.33	0.33	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architectural Coating	0.48	0.48	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.81	0.81	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.06	0.06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.09	0.09	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.15	0.15	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	98.7	0.00	98.7	10.1	0.24	—	423
Total	—	—	—	—	—	—	—	—	—	—	—	98.7	0.00	98.7	10.1	0.24	—	423
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Parking Lot	—	—	—	—	—	—	—	—	—	—	—	98.7	0.00	98.7	10.1	0.24	—	423
Total	—	—	—	—	—	—	—	—	—	—	—	98.7	0.00	98.7	10.1	0.24	—	423
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	16.3	0.00	16.3	1.67	0.04	—	70.1
Total	—	—	—	—	—	—	—	—	—	—	—	16.3	0.00	16.3	1.67	0.04	—	70.1

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Parking Lot	136	136	136	49,470	2,761	2,761	2,761	1,007,640

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	0.00	0.00	253,023

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	270

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Parking Lot	3,694,130	0.00	0.0000	0.0000	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Parking Lot	51,487,971	35,167,087

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Parking Lot	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	32.8	annual days of extreme heat
Extreme Precipitation	0.00	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.19	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A

Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	11.6
AQ-PM	19.1
AQ-DPM	9.09
Drinking Water	30.6
Lead Risk Housing	50.8
Pesticides	90.5
Toxic Releases	7.58
Traffic	3.06
Effect Indicators	—
CleanUp Sites	74.2
Groundwater	77.9
Haz Waste Facilities/Generators	93.2
Impaired Water Bodies	100.0
Solid Waste	86.5
Sensitive Population	—
Asthma	87.6
Cardio-vascular	83.2
Low Birth Weights	26.9
Socioeconomic Factor Indicators	—
Education	82.7
Housing	51.4
Linguistic	88.8
Poverty	94.9
Unemployment	99.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	16.66880534
Employed	7.173104068
Median HI	5.299627871
Education	—
Bachelor's or higher	5.017323239
High school enrollment	16.8741178
Preschool enrollment	68.89516233
Transportation	—
Auto Access	18.40112922
Active commuting	51.10997049
Social	—
2-parent households	13.28114975
Voting	16.79712563
Neighborhood	—
Alcohol availability	70.25535737
Park access	33.85089183
Retail density	4.311561658
Supermarket access	49.58295907
Tree canopy	0.782753753
Housing	—
Homeownership	38.3036058
Housing habitability	30.96368536
Low-inc homeowner severe housing cost burden	26.76761196
Low-inc renter severe housing cost burden	52.89362248

Uncrowded housing	38.58591043
Health Outcomes	—
Insured adults	21.00603105
Arthritis	0.0
Asthma ER Admissions	30.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	41.7
Cognitively Disabled	50.3
Physically Disabled	19.5
Heart Attack ER Admissions	46.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	54.3
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0

Children	14.1
Elderly	42.0
English Speaking	18.7
Foreign-born	65.3
Outdoor Workers	5.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	85.8
Traffic Density	4.9
Traffic Access	23.0
Other Indices	—
Hardship	92.9
Other Decision Support	—
2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	82.0
Healthy Places Index Score for Project Location (b)	11.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	project-specific information
Operations: Vehicle Data	Trip rates are based on ITE Land Use Code 154.
Operations: Landscape Equipment	Assumed 270 summer days for desert region.
Operations: Road Dust	All roads used by future developments projects within the Specific Plan Area would be required to be paved. Per ICAPCD guidance a value of 85% paved is assumed in the modeling to account for the high levels of entrained dust generated from vehicle travel on paved roadways in the region.
Operations: Water and Waste Water	Water data are based on applicant-provided calculations for the land use.
Characteristics: Utility Information	GHG intensity factors adjusted per RPS requirements

Lithium Valley Operation - Phase 2 - Outdoor Storage of Trucks, Trailers, Shipping Containers Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Lithium Valley Operation - Phase 2 - Outdoor Storage of Trucks, Trailers, Shipping Containers
Operational Year	2045
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	4.80
Location	33.18829759139308, -115.6026869228474
County	Imperial
City	Unincorporated
Air District	Imperial County APCD
Air Basin	Salton Sea
TAZ	5600
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Parking Lot	96.8	Acre	96.8	0.00	0.00	1,405,629	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.24	1.20	0.51	6.20	0.02	0.01	310	310	0.01	31.1	31.1	0.00	1,992	1,992	0.03	0.08	0.55	2,016
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.19	1.15	0.57	3.98	0.02	0.01	310	310	0.01	31.1	31.1	0.00	1,756	1,756	0.03	0.08	0.01	1,781
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.21	1.17	0.56	4.76	0.02	0.01	306	306	0.01	30.7	30.7	0.00	1,853	1,853	0.03	0.08	0.24	1,877
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.22	0.21	0.10	0.87	< 0.005	< 0.005	55.8	55.8	< 0.005	5.60	5.61	0.00	307	307	0.01	0.01	0.04	311

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.43	0.39	0.51	6.20	0.02	0.01	310	310	0.01	31.1	31.1	—	1,992	1,992	0.03	0.08	0.55	2,016

Area	0.81	0.81	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	1.24	1.20	0.51	6.20	0.02	0.01	310	310	0.01	31.1	31.1	0.00	1,992	1,992	0.03	0.08	0.55	2,016
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.38	0.34	0.57	3.98	0.02	0.01	310	310	0.01	31.1	31.1	—	1,756	1,756	0.03	0.08	0.01	1,781
Area	0.81	0.81	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	1.19	1.15	0.57	3.98	0.02	0.01	310	310	0.01	31.1	31.1	0.00	1,756	1,756	0.03	0.08	0.01	1,781
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.39	0.35	0.56	4.76	0.02	0.01	306	306	0.01	30.7	30.7	—	1,853	1,853	0.03	0.08	0.24	1,877
Area	0.81	0.81	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	1.21	1.17	0.56	4.76	0.02	0.01	306	306	0.01	30.7	30.7	0.00	1,853	1,853	0.03	0.08	0.24	1,877
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.07	0.06	0.10	0.87	< 0.005	< 0.005	55.8	55.8	< 0.005	5.60	5.61	—	307	307	0.01	0.01	0.04	311
Area	0.15	0.15	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	0.22	0.21	0.10	0.87	< 0.005	< 0.005	55.8	55.8	< 0.005	5.60	5.61	0.00	307	307	0.01	0.01	0.04	311

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	0.43	0.39	0.51	6.20	0.02	0.01	310	310	0.01	31.1	31.1	—	1,992	1,992	0.03	0.08	0.55	2,016
Total	0.43	0.39	0.51	6.20	0.02	0.01	310	310	0.01	31.1	31.1	—	1,992	1,992	0.03	0.08	0.55	2,016
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	0.38	0.34	0.57	3.98	0.02	0.01	310	310	0.01	31.1	31.1	—	1,756	1,756	0.03	0.08	0.01	1,781
Total	0.38	0.34	0.57	3.98	0.02	0.01	310	310	0.01	31.1	31.1	—	1,756	1,756	0.03	0.08	0.01	1,781
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	0.07	0.06	0.10	0.87	< 0.005	< 0.005	55.8	55.8	< 0.005	5.60	5.61	—	307	307	0.01	0.01	0.04	311
Total	0.07	0.06	0.10	0.87	< 0.005	< 0.005	55.8	55.8	< 0.005	5.60	5.61	—	307	307	0.01	0.01	0.04	311

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.33	0.33	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.48	0.48	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.81	0.81	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.33	0.33	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architectural Coating	0.48	0.48	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.81	0.81	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.06	0.06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.09	0.09	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.15	0.15	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Parking Lot	136	136	136	49,470	2,761	2,761	2,761	1,007,640

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	0.00	0.00	253,023

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	270

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Parking Lot	3,694,130	0.00	0.0000	0.0000	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Parking Lot	0.00	92,153,393

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Parking Lot	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	32.8	annual days of extreme heat
Extreme Precipitation	0.00	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.19	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A

Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	11.6
AQ-PM	19.1
AQ-DPM	9.09
Drinking Water	30.6
Lead Risk Housing	50.8
Pesticides	90.5
Toxic Releases	7.58
Traffic	3.06
Effect Indicators	—
CleanUp Sites	74.2
Groundwater	77.9
Haz Waste Facilities/Generators	93.2
Impaired Water Bodies	100.0
Solid Waste	86.5
Sensitive Population	—
Asthma	87.6
Cardio-vascular	83.2
Low Birth Weights	26.9
Socioeconomic Factor Indicators	—
Education	82.7
Housing	51.4
Linguistic	88.8
Poverty	94.9
Unemployment	99.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	16.66880534
Employed	7.173104068
Median HI	5.299627871
Education	—
Bachelor's or higher	5.017323239
High school enrollment	16.8741178
Preschool enrollment	68.89516233
Transportation	—
Auto Access	18.40112922
Active commuting	51.10997049
Social	—
2-parent households	13.28114975
Voting	16.79712563
Neighborhood	—
Alcohol availability	70.25535737
Park access	33.85089183
Retail density	4.311561658
Supermarket access	49.58295907
Tree canopy	0.782753753
Housing	—
Homeownership	38.3036058
Housing habitability	30.96368536
Low-inc homeowner severe housing cost burden	26.76761196
Low-inc renter severe housing cost burden	52.89362248

Uncrowded housing	38.58591043
Health Outcomes	—
Insured adults	21.00603105
Arthritis	0.0
Asthma ER Admissions	30.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	41.7
Cognitively Disabled	50.3
Physically Disabled	19.5
Heart Attack ER Admissions	46.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	54.3
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0

Children	14.1
Elderly	42.0
English Speaking	18.7
Foreign-born	65.3
Outdoor Workers	5.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	85.8
Traffic Density	4.9
Traffic Access	23.0
Other Indices	—
Hardship	92.9
Other Decision Support	—
2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	82.0
Healthy Places Index Score for Project Location (b)	11.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	project-specific information
Operations: Vehicle Data	Trip rates are based on ITE Land Use Code 154.
Operations: Landscape Equipment	Assumed 270 summer days for desert region.
Operations: Road Dust	All roads used by future developments projects within the Specific Plan Area would be required to be paved. Per ICAPCD guidance a value of 85% paved is assumed in the modeling to account for the high levels of entrained dust generated from vehicle travel on paved roadways in the region.
Operations: Water and Waste Water	Water data are based on applicant-provided calculations for the land use.
Characteristics: Utility Information	GHG intensity factors adjusted per RPS requirements

Lithium Valley Operation - Phase 2 - Passive Uses Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Lithium Valley Operation - Phase 2 - Passive Uses
Operational Year	2045
Lead Agency	—
Land Use Scale	Plan/community
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	4.80
Location	33.18829759139308, -115.6026869228474
County	Imperial
City	Unincorporated
Air District	Imperial County APCD
Air Basin	Salton Sea
TAZ	5600
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
City Park	9,639	Acre	9,639	0.00	0.00	0.00	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	447	0.00	447	44.7	0.00	0.00	1,563
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	447	0.00	447	44.7	0.00	0.00	1,563
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	447	0.00	447	44.7	0.00	0.00	1,563
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	74.0	0.00	74.0	7.39	0.00	0.00	259

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Area	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	447	0.00	447	44.7	0.00	—	1,563
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	447	0.00	447	44.7	0.00	0.00	1,563
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Area	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	447	0.00	447	44.7	0.00	—	1,563
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	447	0.00	447	44.7	0.00	0.00	1,563
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Area	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	447	0.00	447	44.7	0.00	—	1,563
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	447	0.00	447	44.7	0.00	0.00	1,563
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Area	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	74.0	0.00	74.0	7.39	0.00	—	259
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	74.0	0.00	74.0	7.39	0.00	0.00	259

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Consum Products	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	447	0.00	447	44.7	0.00	—	1,563
Total	—	—	—	—	—	—	—	—	—	—	—	447	0.00	447	44.7	0.00	—	1,563
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	447	0.00	447	44.7	0.00	—	1,563
Total	—	—	—	—	—	—	—	—	—	—	—	447	0.00	447	44.7	0.00	—	1,563
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	74.0	0.00	74.0	7.39	0.00	—	259
Total	—	—	—	—	—	—	—	—	—	—	—	74.0	0.00	74.0	7.39	0.00	—	259

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	0.00	0.00	—

5.10.3. Landscape Equipment

Equipment Type	Fuel Type	Number Per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
City Park	0.00	0.00	0.0000	0.0000	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
City Park	0.00	1,772,568,992

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
City Park	829	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	32.8	annual days of extreme heat
Extreme Precipitation	0.00	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.19	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	11.6
AQ-PM	19.1

AQ-DPM	9.09
Drinking Water	30.6
Lead Risk Housing	50.8
Pesticides	90.5
Toxic Releases	7.58
Traffic	3.06
Effect Indicators	—
CleanUp Sites	74.2
Groundwater	77.9
Haz Waste Facilities/Generators	93.2
Impaired Water Bodies	100.0
Solid Waste	86.5
Sensitive Population	—
Asthma	87.6
Cardio-vascular	83.2
Low Birth Weights	26.9
Socioeconomic Factor Indicators	—
Education	82.7
Housing	51.4
Linguistic	88.8
Poverty	94.9
Unemployment	99.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	16.66880534

Employed	7.173104068
Median HI	5.299627871
Education	—
Bachelor's or higher	5.017323239
High school enrollment	16.8741178
Preschool enrollment	68.89516233
Transportation	—
Auto Access	18.40112922
Active commuting	51.10997049
Social	—
2-parent households	13.28114975
Voting	16.79712563
Neighborhood	—
Alcohol availability	70.25535737
Park access	33.85089183
Retail density	4.311561658
Supermarket access	49.58295907
Tree canopy	0.782753753
Housing	—
Homeownership	38.3036058
Housing habitability	30.96368536
Low-inc homeowner severe housing cost burden	26.76761196
Low-inc renter severe housing cost burden	52.89362248
Uncrowded housing	38.58591043
Health Outcomes	—
Insured adults	21.00603105
Arthritis	0.0
Asthma ER Admissions	30.1

High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	41.7
Cognitively Disabled	50.3
Physically Disabled	19.5
Heart Attack ER Admissions	46.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	54.3
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	14.1
Elderly	42.0
English Speaking	18.7
Foreign-born	65.3
Outdoor Workers	5.4

Climate Change Adaptive Capacity	—
Impervious Surface Cover	85.8
Traffic Density	4.9
Traffic Access	23.0
Other Indices	—
Hardship	92.9
Other Decision Support	—
2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	82.0
Healthy Places Index Score for Project Location (b)	11.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification

Operations: Refrigerants	No sources of refrigerants anticipated as part of operations.
Operations: Road Dust	85% of roads assumed to be paved based on ICAPCD guidance and project narrative.
Operations: Water and Waste Water	Water data are based on applicant-provided calculations for the land use.
Characteristics: Utility Information	GHG intensity factors adjusted per RPS requirements.
Operations: Vehicle Data	Trips associated with the restoration/passive land uses were not modeled to generate trips.

Lithium Valley Operation - Phase 2 - Public Transit Hub Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Lithium Valley Operation - Phase 2 - Public Transit Hub
Operational Year	2045
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	4.80
Location	33.18829759139308, -115.6026869228474
County	Imperial
City	Unincorporated
Air District	Imperial County APCD
Air Basin	Salton Sea
TAZ	5600
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Parking Lot	684	1000sqft	15.7	0.00	0.00	—	—	—
General Office Building	137	1000sqft	137	136,768	68,384	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	15.5	14.4	13.3	163	0.50	0.30	7,818	7,818	0.28	785	785	99.1	50,751	50,850	10.9	2.00	14.3	51,732
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	13.2	12.2	14.9	101	0.44	0.29	7,818	7,818	0.27	785	785	99.1	44,771	44,870	10.9	2.07	0.70	45,761
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	14.3	13.3	14.4	125	0.46	0.29	7,716	7,716	0.28	775	775	99.1	47,235	47,335	10.9	2.04	6.37	48,222
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.62	2.42	2.64	22.8	0.08	0.05	1,408	1,408	0.05	141	141	16.4	7,820	7,837	1.80	0.34	1.05	7,984

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	10.8	9.83	12.9	156	0.49	0.26	7,818	7,818	0.24	785	785	—	50,257	50,257	0.86	1.92	14.0	50,866

Area	4.64	4.56	0.05	5.95	< 0.005	0.01	—	0.01	0.01	—	0.01	—	24.5	24.5	< 0.005	< 0.005	—	24.5
Energy	0.04	0.02	0.39	0.33	< 0.005	0.03	—	0.03	0.03	—	0.03	—	470	470	0.04	< 0.005	—	471
Water	—	—	—	—	—	—	—	—	—	—	—	30.5	0.00	30.5	3.13	0.07	—	131
Waste	—	—	—	—	—	—	—	—	—	—	—	68.6	0.00	68.6	6.85	0.00	—	240
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.33	0.33
Total	15.5	14.4	13.3	163	0.50	0.30	7,818	7,818	0.28	785	785	99.1	50,751	50,850	10.9	2.00	14.3	51,732
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	9.57	8.59	14.5	100	0.43	0.26	7,818	7,818	0.24	785	785	—	44,302	44,302	0.87	2.00	0.36	44,919
Area	3.58	3.58	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.04	0.02	0.39	0.33	< 0.005	0.03	—	0.03	0.03	—	0.03	—	470	470	0.04	< 0.005	—	471
Water	—	—	—	—	—	—	—	—	—	—	—	30.5	0.00	30.5	3.13	0.07	—	131
Waste	—	—	—	—	—	—	—	—	—	—	—	68.6	0.00	68.6	6.85	0.00	—	240
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.33	0.33
Total	13.2	12.2	14.9	101	0.44	0.29	7,818	7,818	0.27	785	785	99.1	44,771	44,870	10.9	2.07	0.70	45,761
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	9.94	8.94	14.0	120	0.46	0.26	7,716	7,716	0.24	775	775	—	46,748	46,748	0.85	1.97	6.04	47,362
Area	4.36	4.30	0.04	4.40	< 0.005	0.01	—	0.01	0.01	—	0.01	—	18.1	18.1	< 0.005	< 0.005	—	18.2
Energy	0.04	0.02	0.39	0.33	< 0.005	0.03	—	0.03	0.03	—	0.03	—	470	470	0.04	< 0.005	—	471
Water	—	—	—	—	—	—	—	—	—	—	—	30.5	0.00	30.5	3.13	0.07	—	131
Waste	—	—	—	—	—	—	—	—	—	—	—	68.6	0.00	68.6	6.85	0.00	—	240
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.33	0.33
Total	14.3	13.3	14.4	125	0.46	0.29	7,716	7,716	0.28	775	775	99.1	47,235	47,335	10.9	2.04	6.37	48,222
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.81	1.63	2.56	21.9	0.08	0.05	1,408	1,408	0.04	141	141	—	7,740	7,740	0.14	0.33	1.00	7,841
Area	0.80	0.79	0.01	0.80	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.00	3.00	< 0.005	< 0.005	—	3.01
Energy	0.01	< 0.005	0.07	0.06	< 0.005	0.01	—	0.01	0.01	—	0.01	—	77.8	77.8	0.01	< 0.005	—	78.0

Water	—	—	—	—	—	—	—	—	—	—	—	5.05	0.00	5.05	0.52	0.01	—	21.7
Waste	—	—	—	—	—	—	—	—	—	—	—	11.3	0.00	11.3	1.13	0.00	—	39.7
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.06	0.06
Total	2.62	2.42	2.64	22.8	0.08	0.05	1,408	1,408	0.05	141	141	16.4	7,820	7,837	1.80	0.34	1.05	7,984

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
General Office Building	10.8	9.83	12.9	156	0.49	0.26	7,818	7,818	0.24	785	785	—	50,257	50,257	0.86	1.92	14.0	50,866
Total	10.8	9.83	12.9	156	0.49	0.26	7,818	7,818	0.24	785	785	—	50,257	50,257	0.86	1.92	14.0	50,866
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
General Office Building	9.57	8.59	14.5	100	0.43	0.26	7,818	7,818	0.24	785	785	—	44,302	44,302	0.87	2.00	0.36	44,919
Total	9.57	8.59	14.5	100	0.43	0.26	7,818	7,818	0.24	785	785	—	44,302	44,302	0.87	2.00	0.36	44,919
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
General Office Building	1.81	1.63	2.56	21.9	0.08	0.05	1,408	1,408	0.04	141	141	—	7,740	7,740	0.14	0.33	1.00	7,841
Total	1.81	1.63	2.56	21.9	0.08	0.05	1,408	1,408	0.04	141	141	—	7,740	7,740	0.14	0.33	1.00	7,841

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
General Office Building	0.04	0.02	0.39	0.33	< 0.005	0.03	—	0.03	0.03	—	0.03	—	470	470	0.04	< 0.005	—	471
Total	0.04	0.02	0.39	0.33	< 0.005	0.03	—	0.03	0.03	—	0.03	—	470	470	0.04	< 0.005	—	471
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
General Office Building	0.04	0.02	0.39	0.33	< 0.005	0.03	—	0.03	0.03	—	0.03	—	470	470	0.04	< 0.005	—	471
Total	0.04	0.02	0.39	0.33	< 0.005	0.03	—	0.03	0.03	—	0.03	—	470	470	0.04	< 0.005	—	471
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
General Office Building	0.01	< 0.005	0.07	0.06	< 0.005	0.01	—	0.01	0.01	—	0.01	—	77.8	77.8	0.01	< 0.005	—	78.0
Total	0.01	< 0.005	0.07	0.06	< 0.005	0.01	—	0.01	0.01	—	0.01	—	77.8	77.8	0.01	< 0.005	—	78.0

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	2.98	2.98	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.60	0.60	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	1.06	0.98	0.05	5.95	< 0.005	0.01	—	0.01	0.01	—	0.01	—	24.5	24.5	< 0.005	< 0.005	—	24.5
Total	4.64	4.56	0.05	5.95	< 0.005	0.01	—	0.01	0.01	—	0.01	—	24.5	24.5	< 0.005	< 0.005	—	24.5
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	2.98	2.98	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.60	0.60	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	3.58	3.58	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Consumer Product	0.54	0.54	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.11	0.11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.14	0.13	0.01	0.80	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.00	3.00	< 0.005	< 0.005	—	3.01
Total	0.80	0.79	0.01	0.80	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.00	3.00	< 0.005	< 0.005	—	3.01

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
General Office Building	—	—	—	—	—	—	—	—	—	—	—	30.5	0.00	30.5	3.13	0.07	—	131
Total	—	—	—	—	—	—	—	—	—	—	—	30.5	0.00	30.5	3.13	0.07	—	131
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

General Office Building	—	—	—	—	—	—	—	—	—	—	—	30.5	0.00	30.5	3.13	0.07	—	131
Total	—	—	—	—	—	—	—	—	—	—	—	30.5	0.00	30.5	3.13	0.07	—	131
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
General Office Building	—	—	—	—	—	—	—	—	—	—	—	5.05	0.00	5.05	0.52	0.01	—	21.7
Total	—	—	—	—	—	—	—	—	—	—	—	5.05	0.00	5.05	0.52	0.01	—	21.7

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
General Office Building	—	—	—	—	—	—	—	—	—	—	—	68.6	0.00	68.6	6.85	0.00	—	240
Total	—	—	—	—	—	—	—	—	—	—	—	68.6	0.00	68.6	6.85	0.00	—	240
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

General Office Building	—	—	—	—	—	—	—	—	—	—	—	68.6	0.00	68.6	6.85	0.00	—	240
Total	—	—	—	—	—	—	—	—	—	—	—	68.6	0.00	68.6	6.85	0.00	—	240
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
General Office Building	—	—	—	—	—	—	—	—	—	—	—	11.3	0.00	11.3	1.13	0.00	—	39.7
Total	—	—	—	—	—	—	—	—	—	—	—	11.3	0.00	11.3	1.13	0.00	—	39.7

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.33	0.33
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.33	0.33
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.33	0.33
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.33	0.33
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.06	0.06
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.06	0.06

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
General Office Building	3,419	3,419	3,419	1,248,026	69,646	69,646	69,646	25,420,733

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	205,152	68,384	41,030

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	270

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Parking Lot	599,044	0.00	0.0000	0.0000	0.00
General Office Building	5,201,620	0.00	0.0000	0.0000	1,465,662

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Parking Lot	0.00	0.00
General Office Building	15,919,781	916,739

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Parking Lot	0.00	—
General Office Building	127	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
General Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
General Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	32.8	annual days of extreme heat
Extreme Precipitation	0.00	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.19	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	4	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A

Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	4	1	1	4
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	11.6
AQ-PM	19.1
AQ-DPM	9.09
Drinking Water	30.6
Lead Risk Housing	50.8
Pesticides	90.5
Toxic Releases	7.58
Traffic	3.06
Effect Indicators	—
CleanUp Sites	74.2
Groundwater	77.9
Haz Waste Facilities/Generators	93.2
Impaired Water Bodies	100.0
Solid Waste	86.5
Sensitive Population	—
Asthma	87.6
Cardio-vascular	83.2
Low Birth Weights	26.9
Socioeconomic Factor Indicators	—
Education	82.7
Housing	51.4
Linguistic	88.8
Poverty	94.9
Unemployment	99.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	16.66880534
Employed	7.173104068
Median HI	5.299627871
Education	—
Bachelor's or higher	5.017323239
High school enrollment	16.8741178
Preschool enrollment	68.89516233
Transportation	—
Auto Access	18.40112922
Active commuting	51.10997049
Social	—
2-parent households	13.28114975
Voting	16.79712563
Neighborhood	—
Alcohol availability	70.25535737
Park access	33.85089183
Retail density	4.311561658
Supermarket access	49.58295907
Tree canopy	0.782753753
Housing	—
Homeownership	38.3036058
Housing habitability	30.96368536
Low-inc homeowner severe housing cost burden	26.76761196
Low-inc renter severe housing cost burden	52.89362248

Uncrowded housing	38.58591043
Health Outcomes	—
Insured adults	21.00603105
Arthritis	0.0
Asthma ER Admissions	30.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	41.7
Cognitively Disabled	50.3
Physically Disabled	19.5
Heart Attack ER Admissions	46.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	54.3
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0

Children	14.1
Elderly	42.0
English Speaking	18.7
Foreign-born	65.3
Outdoor Workers	5.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	85.8
Traffic Density	4.9
Traffic Access	23.0
Other Indices	—
Hardship	92.9
Other Decision Support	—
2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	82.0
Healthy Places Index Score for Project Location (b)	11.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Land use data are based on applicant-provided buildout assumptions.
Operations: Landscape Equipment	Assumed 270 summer days for desert region.
Operations: Water and Waste Water	Water data are based on applicant-provided calculations for the land use.
Operations: Road Dust	All roads used by future developments projects within the Specific Plan Area would be required to be paved. Per ICAPCD guidance a value of 85% paved is assumed in the modeling to account for the high levels of entrained dust generated from vehicle travel on paved roadways in the region.
Operations: Vehicle Data	Trip rate of 25 trips/tsf is based on SANDAG trip rate for a transit center (Bus Depot).
Characteristics: Utility Information	GHG intensity factors adjusted per RPS.

Lithium Valley Operation - Phase 2 - Research and Development Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Lithium Valley Operation - Phase 2 - Research and Development
Operational Year	2045
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	4.80
Location	33.18829759139308, -115.6026869228474
County	Imperial
City	Unincorporated
Air District	Imperial County APCD
Air Basin	Salton Sea
TAZ	5600
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Research & Development	1,190	1000sqft	859	1,189,787	237,957	—	—	—
Parking Lot	2,380	1000sqft	54.6	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	83.7	78.7	58.1	662	1.93	1.58	30,142	30,144	1.51	3,027	3,028	1,272	198,903	200,176	134	10.4	84.3	206,714
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	69.5	65.4	63.9	395	1.70	1.49	30,142	30,143	1.44	3,027	3,028	1,272	175,730	177,002	134	10.7	31.8	183,574
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	66.7	63.1	45.0	390	1.35	1.11	22,383	22,384	1.05	2,248	2,249	1,272	139,976	141,248	133	8.70	47.9	147,220
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	12.2	11.5	8.22	71.2	0.25	0.20	4,085	4,085	0.19	410	410	211	23,175	23,385	22.1	1.44	7.93	24,374

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	41.8	37.9	49.7	603	1.90	0.99	30,142	30,143	0.94	3,027	3,028	—	193,765	193,765	3.31	7.41	53.9	196,111

Area	39.7	39.0	0.44	51.7	< 0.005	0.09	—	0.09	0.07	—	0.07	—	213	213	0.01	< 0.005	—	214
Energy	0.38	0.19	3.42	2.88	0.02	0.26	—	0.26	0.26	—	0.26	—	4,086	4,086	0.36	0.01	—	4,098
Water	—	—	—	—	—	—	—	—	—	—	—	1,224	0.00	1,224	125	2.98	—	5,249
Waste	—	—	—	—	—	—	—	—	—	—	—	48.7	0.00	48.7	4.87	0.00	—	170
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	30.4	30.4
Stationary	1.80	1.64	4.59	4.18	0.01	0.24	0.00	0.24	0.24	0.00	0.24	0.00	840	840	0.03	0.01	0.00	842
Total	83.7	78.7	58.1	662	1.93	1.58	30,142	30,144	1.51	3,027	3,028	1,272	198,903	200,176	134	10.4	84.3	206,714
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	36.9	33.1	55.9	387	1.67	0.99	30,142	30,143	0.94	3,027	3,028	—	170,804	170,804	3.34	7.70	1.40	173,184
Area	30.5	30.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.38	0.19	3.42	2.88	0.02	0.26	—	0.26	0.26	—	0.26	—	4,086	4,086	0.36	0.01	—	4,098
Water	—	—	—	—	—	—	—	—	—	—	—	1,224	0.00	1,224	125	2.98	—	5,249
Waste	—	—	—	—	—	—	—	—	—	—	—	48.7	0.00	48.7	4.87	0.00	—	170
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	30.4	30.4
Stationary	1.80	1.64	4.59	4.18	0.01	0.24	0.00	0.24	0.24	0.00	0.24	0.00	840	840	0.03	0.01	0.00	842
Total	69.5	65.4	63.9	395	1.70	1.49	30,142	30,143	1.44	3,027	3,028	1,272	175,730	177,002	134	10.7	31.8	183,574
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	28.8	25.9	40.7	348	1.33	0.75	22,383	22,384	0.71	2,248	2,248	—	135,617	135,617	2.48	5.71	17.5	137,399
Area	37.3	36.7	0.32	38.3	< 0.005	0.07	—	0.07	0.05	—	0.05	—	157	157	0.01	< 0.005	—	158
Energy	0.38	0.19	3.42	2.88	0.02	0.26	—	0.26	0.26	—	0.26	—	4,086	4,086	0.36	0.01	—	4,098
Water	—	—	—	—	—	—	—	—	—	—	—	1,224	0.00	1,224	125	2.98	—	5,249
Waste	—	—	—	—	—	—	—	—	—	—	—	48.7	0.00	48.7	4.87	0.00	—	170
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	30.4	30.4
Stationary	0.25	0.22	0.63	0.57	< 0.005	0.03	0.00	0.03	0.03	0.00	0.03	0.00	115	115	< 0.005	< 0.005	0.00	115
Total	66.7	63.1	45.0	390	1.35	1.11	22,383	22,384	1.05	2,248	2,249	1,272	139,976	141,248	133	8.70	47.9	147,220

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	5.26	4.74	7.42	63.6	0.24	0.14	4,085	4,085	0.13	410	410	—	22,453	22,453	0.41	0.95	2.90	22,748
Area	6.80	6.71	0.06	6.99	< 0.005	0.01	—	0.01	0.01	—	0.01	—	26.1	26.1	< 0.005	< 0.005	—	26.2
Energy	0.07	0.03	0.63	0.53	< 0.005	0.05	—	0.05	0.05	—	0.05	—	677	677	0.06	< 0.005	—	678
Water	—	—	—	—	—	—	—	—	—	—	—	203	0.00	203	20.8	0.49	—	869
Waste	—	—	—	—	—	—	—	—	—	—	—	8.07	0.00	8.07	0.81	0.00	—	28.2
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.03	5.03
Stationary	0.05	0.04	0.11	0.10	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	19.0	19.0	< 0.005	< 0.005	0.00	19.1
Total	12.2	11.5	8.22	71.2	0.25	0.20	4,085	4,085	0.19	410	410	211	23,175	23,385	22.1	1.44	7.93	24,374

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Research & Development	41.8	37.9	49.7	603	1.90	0.99	30,142	30,143	0.94	3,027	3,028	—	193,765	193,765	3.31	7.41	53.9	196,111
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	41.8	37.9	49.7	603	1.90	0.99	30,142	30,143	0.94	3,027	3,028	—	193,765	193,765	3.31	7.41	53.9	196,111
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Research & Development	36.9	33.1	55.9	387	1.67	0.99	30,142	30,143	0.94	3,027	3,028	—	170,804	170,804	3.34	7.70	1.40	173,184
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	36.9	33.1	55.9	387	1.67	0.99	30,142	30,143	0.94	3,027	3,028	—	170,804	170,804	3.34	7.70	1.40	173,184
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Research & Development	5.26	4.74	7.42	63.6	0.24	0.14	4,085	4,085	0.13	410	410	—	22,453	22,453	0.41	0.95	2.90	22,748
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	5.26	4.74	7.42	63.6	0.24	0.14	4,085	4,085	0.13	410	410	—	22,453	22,453	0.41	0.95	2.90	22,748

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Research & Development	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Research & Development	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Research & Development	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Research & Development	0.38	0.19	3.42	2.88	0.02	0.26	—	0.26	0.26	—	0.26	—	4,086	4,086	0.36	0.01	—	4,098
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.38	0.19	3.42	2.88	0.02	0.26	—	0.26	0.26	—	0.26	—	4,086	4,086	0.36	0.01	—	4,098
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Research & Development	0.38	0.19	3.42	2.88	0.02	0.26	—	0.26	0.26	—	0.26	—	4,086	4,086	0.36	0.01	—	4,098
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.38	0.19	3.42	2.88	0.02	0.26	—	0.26	0.26	—	0.26	—	4,086	4,086	0.36	0.01	—	4,098
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Research & Development	0.07	0.03	0.63	0.53	< 0.005	0.05	—	0.05	0.05	—	0.05	—	677	677	0.06	< 0.005	—	678
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.07	0.03	0.63	0.53	< 0.005	0.05	—	0.05	0.05	—	0.05	—	677	677	0.06	< 0.005	—	678

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	25.6	25.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	4.81	4.81	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Landscape Equipment	9.22	8.51	0.44	51.7	< 0.005	0.09	—	0.09	0.07	—	0.07	—	213	213	0.01	< 0.005	—	214
Total	39.7	39.0	0.44	51.7	< 0.005	0.09	—	0.09	0.07	—	0.07	—	213	213	0.01	< 0.005	—	214
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	25.6	25.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	4.81	4.81	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	30.5	30.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	4.68	4.68	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.88	0.88	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	1.24	1.15	0.06	6.99	< 0.005	0.01	—	0.01	0.01	—	0.01	—	26.1	26.1	< 0.005	< 0.005	—	26.2
Total	6.80	6.71	0.06	6.99	< 0.005	0.01	—	0.01	0.01	—	0.01	—	26.1	26.1	< 0.005	< 0.005	—	26.2

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Research & Development	—	—	—	—	—	—	—	—	—	—	—	1,224	0.00	1,224	125	2.98	—	5,249
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1,224	0.00	1,224	125	2.98	—	5,249
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Research & Development	—	—	—	—	—	—	—	—	—	—	—	1,224	0.00	1,224	125	2.98	—	5,249
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1,224	0.00	1,224	125	2.98	—	5,249
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Research & Development	—	—	—	—	—	—	—	—	—	—	—	203	0.00	203	20.8	0.49	—	869
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	203	0.00	203	20.8	0.49	—	869

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Research & Development	—	—	—	—	—	—	—	—	—	—	—	48.7	0.00	48.7	4.87	0.00	—	170
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	48.7	0.00	48.7	4.87	0.00	—	170
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Research & Development	—	—	—	—	—	—	—	—	—	—	—	48.7	0.00	48.7	4.87	0.00	—	170
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	48.7	0.00	48.7	4.87	0.00	—	170
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Research & Development	—	—	—	—	—	—	—	—	—	—	—	8.07	0.00	8.07	0.81	0.00	—	28.2
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	8.07	0.00	8.07	0.81	0.00	—	28.2

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Research & Development	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	30.4	30.4
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	30.4	30.4
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Research & Development	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	30.4	30.4
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	30.4	30.4
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Research & Development	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.03	5.03
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.03	5.03

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	1.80	1.64	4.59	4.18	0.01	0.24	0.00	0.24	0.24	0.00	0.24	0.00	840	840	0.03	0.01	0.00	842
Total	1.80	1.64	4.59	4.18	0.01	0.24	0.00	0.24	0.24	0.00	0.24	0.00	840	840	0.03	0.01	0.00	842
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	1.80	1.64	4.59	4.18	0.01	0.24	0.00	0.24	0.24	0.00	0.24	0.00	840	840	0.03	0.01	0.00	842
Total	1.80	1.64	4.59	4.18	0.01	0.24	0.00	0.24	0.24	0.00	0.24	0.00	840	840	0.03	0.01	0.00	842
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Emergency Generat	0.05	0.04	0.11	0.10	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	19.0	19.0	< 0.005	< 0.005	0.00	19.1
Total	0.05	0.04	0.11	0.10	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	19.0	19.0	< 0.005	< 0.005	0.00	19.1

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Research & Development	13,183	2,225	1,297	3,620,591	268,518	45,318	26,416	73,746,904
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	1,784,681	594,894	142,774

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	270

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)

Research & Development	45,250,529	0.00	0.0000	0.0000	12,750,254
Parking Lot	2,084,503	0.00	0.0000	0.0000	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Research & Development	638,556,188	5,316,793
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Research & Development	90.4	—
Parking Lot	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Research & Development	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Research & Development	Household refrigerators and/or freezers	R-134a	1,430	0.45	0.60	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
Emergency Generator	Diesel	2.00	1.00	50.0	500	0.73

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	32.8	annual days of extreme heat
Extreme Precipitation	0.00	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.19	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A

Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	11.6
AQ-PM	19.1
AQ-DPM	9.09
Drinking Water	30.6
Lead Risk Housing	50.8
Pesticides	90.5
Toxic Releases	7.58
Traffic	3.06
Effect Indicators	—
CleanUp Sites	74.2
Groundwater	77.9
Haz Waste Facilities/Generators	93.2
Impaired Water Bodies	100.0
Solid Waste	86.5
Sensitive Population	—
Asthma	87.6
Cardio-vascular	83.2
Low Birth Weights	26.9
Socioeconomic Factor Indicators	—
Education	82.7
Housing	51.4
Linguistic	88.8
Poverty	94.9
Unemployment	99.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	16.66880534
Employed	7.173104068
Median HI	5.299627871
Education	—
Bachelor's or higher	5.017323239
High school enrollment	16.8741178
Preschool enrollment	68.89516233
Transportation	—
Auto Access	18.40112922
Active commuting	51.10997049
Social	—
2-parent households	13.28114975
Voting	16.79712563
Neighborhood	—
Alcohol availability	70.25535737
Park access	33.85089183
Retail density	4.311561658
Supermarket access	49.58295907
Tree canopy	0.782753753
Housing	—
Homeownership	38.3036058
Housing habitability	30.96368536
Low-inc homeowner severe housing cost burden	26.76761196
Low-inc renter severe housing cost burden	52.89362248

Uncrowded housing	38.58591043
Health Outcomes	—
Insured adults	21.00603105
Arthritis	0.0
Asthma ER Admissions	30.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	41.7
Cognitively Disabled	50.3
Physically Disabled	19.5
Heart Attack ER Admissions	46.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	54.3
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0

Children	14.1
Elderly	42.0
English Speaking	18.7
Foreign-born	65.3
Outdoor Workers	5.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	85.8
Traffic Density	4.9
Traffic Access	23.0
Other Indices	—
Hardship	92.9
Other Decision Support	—
2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	82.0
Healthy Places Index Score for Project Location (b)	11.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Land use data are based on applicant-provided buildout assumptions.
Operations: Vehicle Data	Trip rates are based on ITE Land Use Code 760.
Operations: Landscape Equipment	Assumed 270 summer days for desert region.
Operations: Road Dust	All roads used by future developments projects within the Specific Plan Area would be required to be paved. Per ICAPCD guidance a value of 85% paved is assumed in the modeling to account for the high levels of entrained dust generated from vehicle travel on paved roadways in the region.
Operations: Water and Waste Water	Water data are based on applicant-provided calculations for the land use.
Operations: Emergency Generators and Fire Pumps	Assumed 2 back-up generators each operating 1 hour/day and 50 hours/year for maintenance and testing.
Characteristics: Utility Information	GHG intensity factors adjusted per RPS requirements.

Lithium Valley Operation - Phase 2 - Solar Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Lithium Valley Operation - Phase 2 - Solar
Operational Year	2045
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	4.80
Location	33.18829759139308, -115.6026869228474
County	Imperial
City	Unincorporated
Air District	Imperial County APCD
Air Basin	Salton Sea
TAZ	5600
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
General Heavy Industry	596	1000sqft	1,118	596,206	119,241	—	—	—
Parking Lot	1,192	1000sqft	27.4	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	21.7	21.2	4.81	30.2	0.01	0.29	5.39	5.68	0.28	0.54	0.82	398	981	1,379	39.9	0.01	722	3,100
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	17.1	16.9	4.60	4.25	0.01	0.24	5.39	5.63	0.24	0.54	0.78	398	870	1,268	39.9	0.01	722	2,989
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	18.9	18.6	0.80	19.8	< 0.005	0.07	3.80	3.87	0.06	0.38	0.44	398	217	615	39.8	< 0.005	722	2,334
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.45	3.40	0.15	3.62	< 0.005	0.01	0.69	0.71	0.01	0.07	0.08	66.0	35.9	102	6.59	< 0.005	120	386

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.01	0.01	0.01	0.11	< 0.005	< 0.005	5.39	5.39	< 0.005	0.54	0.54	—	34.6	34.6	< 0.005	< 0.005	0.01	35.0

Area	19.9	19.5	0.22	25.9	< 0.005	0.05	—	0.05	0.03	—	0.03	—	107	107	< 0.005	< 0.005	—	107
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	398	0.00	398	39.8	0.00	—	1,394
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	722	722
Stationary	1.80	1.64	4.59	4.18	0.01	0.24	0.00	0.24	0.24	0.00	0.24	0.00	840	840	0.03	0.01	0.00	842
Total	21.7	21.2	4.81	30.2	0.01	0.29	5.39	5.68	0.28	0.54	0.82	398	981	1,379	39.9	0.01	722	3,100
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.01	0.01	0.01	0.07	< 0.005	< 0.005	5.39	5.39	< 0.005	0.54	0.54	—	30.5	30.5	< 0.005	< 0.005	< 0.005	30.9
Area	15.3	15.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	398	0.00	398	39.8	0.00	—	1,394
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	722	722
Stationary	1.80	1.64	4.59	4.18	0.01	0.24	0.00	0.24	0.24	0.00	0.24	0.00	840	840	0.03	0.01	0.00	842
Total	17.1	16.9	4.60	4.25	0.01	0.24	5.39	5.63	0.24	0.54	0.78	398	870	1,268	39.9	0.01	722	2,989
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	< 0.005	< 0.005	0.01	0.06	< 0.005	< 0.005	3.80	3.80	< 0.005	0.38	0.38	—	23.0	23.0	< 0.005	< 0.005	< 0.005	23.3
Area	18.7	18.4	0.16	19.2	< 0.005	0.03	—	0.03	0.03	—	0.03	—	78.9	78.9	< 0.005	< 0.005	—	79.2
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	398	0.00	398	39.8	0.00	—	1,394
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	722	722
Stationary	0.25	0.22	0.63	0.57	< 0.005	0.03	0.00	0.03	0.03	0.00	0.03	0.00	115	115	< 0.005	< 0.005	0.00	115
Total	18.9	18.6	0.80	19.8	< 0.005	0.07	3.80	3.87	0.06	0.38	0.44	398	217	615	39.8	< 0.005	722	2,334

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	0.69	0.69	< 0.005	0.07	0.07	—	3.80	3.80	< 0.005	< 0.005	< 0.005	3.85
Area	3.41	3.36	0.03	3.50	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	13.1	13.1	< 0.005	< 0.005	—	13.1
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	66.0	0.00	66.0	6.59	0.00	—	231
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	120	120
Stationary	0.05	0.04	0.11	0.10	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	19.0	19.0	< 0.005	< 0.005	0.00	19.1
Total	3.45	3.40	0.15	3.62	< 0.005	0.01	0.69	0.71	0.01	0.07	0.08	66.0	35.9	102	6.59	< 0.005	120	386

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Mobile source emissions results are presented in Sections 2.6. No further detailed breakdown of emissions is available.

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	12.9	12.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	2.41	2.41	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	4.62	4.26	0.22	25.9	< 0.005	0.05	—	0.05	0.03	—	0.03	—	107	107	< 0.005	< 0.005	—	107
Total	19.9	19.5	0.22	25.9	< 0.005	0.05	—	0.05	0.03	—	0.03	—	107	107	< 0.005	< 0.005	—	107

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	12.9	12.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	2.41	2.41	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	15.3	15.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	2.35	2.35	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.44	0.44	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.62	0.58	0.03	3.50	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	13.1	13.1	< 0.005	< 0.005	—	13.1
Total	3.41	3.36	0.03	3.50	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	13.1	13.1	< 0.005	< 0.005	—	13.1

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	398	0.00	398	39.8	0.00	—	1,394
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	398	0.00	398	39.8	0.00	—	1,394
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	398	0.00	398	39.8	0.00	—	1,394
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	398	0.00	398	39.8	0.00	—	1,394
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	66.0	0.00	66.0	6.59	0.00	—	231
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	66.0	0.00	66.0	6.59	0.00	—	231

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	722	722
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	722	722
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	722	722
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	722	722
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	120	120
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	120	120

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	1.80	1.64	4.59	4.18	0.01	0.24	0.00	0.24	0.24	0.00	0.24	0.00	840	840	0.03	0.01	0.00	842
Total	1.80	1.64	4.59	4.18	0.01	0.24	0.00	0.24	0.24	0.00	0.24	0.00	840	840	0.03	0.01	0.00	842
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	1.80	1.64	4.59	4.18	0.01	0.24	0.00	0.24	0.24	0.00	0.24	0.00	840	840	0.03	0.01	0.00	842
Total	1.80	1.64	4.59	4.18	0.01	0.24	0.00	0.24	0.24	0.00	0.24	0.00	840	840	0.03	0.01	0.00	842
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.05	0.04	0.11	0.10	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	19.0	19.0	< 0.005	< 0.005	0.00	19.1
Total	0.05	0.04	0.11	0.10	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	19.0	19.0	< 0.005	< 0.005	0.00	19.1

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipm Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Total all Land Uses	2.00	0.00	0.00	521	48.0	0.00	0.00	12,514

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	894,309	298,103	71,545

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	270

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
General Heavy Industry	7,884,000	0.00	0.0000	0.0000	0.00
Parking Lot	1,044,551	0.00	0.0000	0.0000	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
General Heavy Industry	0.00	24,482,406
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
General Heavy Industry	739	—
Parking Lot	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
General Heavy Industry	User Defined	User Defined	23,900	0.76	0.50	0.50	30.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
Emergency Generator	Diesel	2.00	1.00	50.0	500	0.73

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	32.8	annual days of extreme heat
Extreme Precipitation	0.00	annual days with precipitation above 20 mm

Sea Level Rise	—	meters of inundation depth
Wildfire	0.19	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A

Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	11.6
AQ-PM	19.1
AQ-DPM	9.09
Drinking Water	30.6
Lead Risk Housing	50.8
Pesticides	90.5
Toxic Releases	7.58
Traffic	3.06
Effect Indicators	—

CleanUp Sites	74.2
Groundwater	77.9
Haz Waste Facilities/Generators	93.2
Impaired Water Bodies	100.0
Solid Waste	86.5
Sensitive Population	—
Asthma	87.6
Cardio-vascular	83.2
Low Birth Weights	26.9
Socioeconomic Factor Indicators	—
Education	82.7
Housing	51.4
Linguistic	88.8
Poverty	94.9
Unemployment	99.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	16.66880534
Employed	7.173104068
Median HI	5.299627871
Education	—
Bachelor's or higher	5.017323239
High school enrollment	16.8741178
Preschool enrollment	68.89516233
Transportation	—

Auto Access	18.40112922
Active commuting	51.10997049
Social	—
2-parent households	13.28114975
Voting	16.79712563
Neighborhood	—
Alcohol availability	70.25535737
Park access	33.85089183
Retail density	4.311561658
Supermarket access	49.58295907
Tree canopy	0.782753753
Housing	—
Homeownership	38.3036058
Housing habitability	30.96368536
Low-inc homeowner severe housing cost burden	26.76761196
Low-inc renter severe housing cost burden	52.89362248
Uncrowded housing	38.58591043
Health Outcomes	—
Insured adults	21.00603105
Arthritis	0.0
Asthma ER Admissions	30.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	41.7

Cognitively Disabled	50.3
Physically Disabled	19.5
Heart Attack ER Admissions	46.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	54.3
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	14.1
Elderly	42.0
English Speaking	18.7
Foreign-born	65.3
Outdoor Workers	5.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	85.8
Traffic Density	4.9
Traffic Access	23.0
Other Indices	—
Hardship	92.9
Other Decision Support	—

2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	82.0
Healthy Places Index Score for Project Location (b)	11.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Land use data are based on applicant-provided buildout assumptions.
Operations: Road Dust	All roads used by future developments projects within the Specific Plan Area would be required to be paved. Per ICAPCD guidance a value of 85% paved is assumed in the modeling to account for the high levels of entrained dust generated from vehicle travel on paved roadways in the region.
Operations: Energy Use	Electricity consumption for Phase 2 Solar assumed to include system auxiliary energy consumption (2%), based on an assumed capacity of 270 MW system, operating 4 hours/day and 365 days/year.

Operations: Water and Waste Water	Water data are based on applicant-provided calculations for the land use. Outdoor water use would include annual panel washing and other infrequent activities. No indoor water use anticipated.
Operations: Refrigerants	SF6 usage anticipated for breakers/inverters. Assumed 1000 pounds of SF6 across the site.
Operations: Landscape Equipment	Assumed 270 summer days for desert region.
Operations: Emergency Generators and Fire Pumps	Assumed 2 back-up generators operating 1 hour/day and 50 hours/year each for maintenance and testing.
Characteristics: Utility Information	GHG intensity factors adjusted per RPS requirements.

Lithium Valley Operation - Phase 2 - Substation Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Lithium Valley Operation - Phase 2 - Substation
Operational Year	2045
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	4.80
Location	33.18829759139308, -115.6026869228474
County	Imperial
City	Unincorporated
Air District	Imperial County APCD
Air Basin	Salton Sea
TAZ	5600
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
General Heavy Industry	648	1000sqft	645	647,822	129,564	—	—	—
Parking Lot	1.00	1000sqft	29.7	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	22.5	22.0	2.54	30.4	0.01	0.17	5.39	5.56	0.16	0.54	0.70	433	570	1,003	43.3	0.01	58.7	2,146
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	17.5	17.4	2.30	2.16	< 0.005	0.12	5.39	5.51	0.12	0.54	0.66	433	450	883	43.3	< 0.005	58.7	2,025
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	20.4	20.1	0.50	21.2	< 0.005	0.05	3.80	3.85	0.04	0.38	0.43	433	166	599	43.3	< 0.005	58.7	1,740
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.73	3.67	0.09	3.87	< 0.005	0.01	0.69	0.70	0.01	0.07	0.08	71.7	27.5	99.2	7.16	< 0.005	9.72	288

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.01	0.01	0.01	0.11	< 0.005	< 0.005	5.39	5.39	< 0.005	0.54	0.54	—	34.6	34.6	< 0.005	< 0.005	0.01	35.0

Area	21.6	21.2	0.24	28.2	< 0.005	0.05	—	0.05	0.04	—	0.04	—	116	116	< 0.005	< 0.005	—	116
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	433	0.00	433	43.3	0.00	—	1,515
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	58.7	58.7
Stationary	0.90	0.82	2.29	2.09	< 0.005	0.12	0.00	0.12	0.12	0.00	0.12	0.00	420	420	0.02	< 0.005	0.00	421
Total	22.5	22.0	2.54	30.4	0.01	0.17	5.39	5.56	0.16	0.54	0.70	433	570	1,003	43.3	0.01	58.7	2,146
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.01	0.01	0.01	0.07	< 0.005	< 0.005	5.39	5.39	< 0.005	0.54	0.54	—	30.5	30.5	< 0.005	< 0.005	< 0.005	30.9
Area	16.6	16.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	433	0.00	433	43.3	0.00	—	1,515
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	58.7	58.7
Stationary	0.90	0.82	2.29	2.09	< 0.005	0.12	0.00	0.12	0.12	0.00	0.12	0.00	420	420	0.02	< 0.005	0.00	421
Total	17.5	17.4	2.30	2.16	< 0.005	0.12	5.39	5.51	0.12	0.54	0.66	433	450	883	43.3	< 0.005	58.7	2,025
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	< 0.005	< 0.005	0.01	0.06	< 0.005	< 0.005	3.80	3.80	< 0.005	0.38	0.38	—	23.0	23.0	< 0.005	< 0.005	< 0.005	23.3
Area	20.3	20.0	0.18	20.8	< 0.005	0.04	—	0.04	0.03	—	0.03	—	85.7	85.7	< 0.005	< 0.005	—	86.0
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	433	0.00	433	43.3	0.00	—	1,515
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	58.7	58.7
Stationary	0.12	0.11	0.31	0.29	< 0.005	0.02	0.00	0.02	0.02	0.00	0.02	0.00	57.5	57.5	< 0.005	< 0.005	0.00	57.7
Total	20.4	20.1	0.50	21.2	< 0.005	0.05	3.80	3.85	0.04	0.38	0.43	433	166	599	43.3	< 0.005	58.7	1,740

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	0.69	0.69	< 0.005	0.07	0.07	—	3.80	3.80	< 0.005	< 0.005	< 0.005	3.85
Area	3.70	3.65	0.03	3.80	< 0.005	0.01	—	0.01	0.01	—	0.01	—	14.2	14.2	< 0.005	< 0.005	—	14.2
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	71.7	0.00	71.7	7.16	0.00	—	251
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9.72	9.72
Stationary	0.02	0.02	0.06	0.05	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	9.52	9.52	< 0.005	< 0.005	0.00	9.55
Total	3.73	3.67	0.09	3.87	< 0.005	0.01	0.69	0.70	0.01	0.07	0.08	71.7	27.5	99.2	7.16	< 0.005	9.72	288

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Mobile source emissions results are presented in Sections 2.6. No further detailed breakdown of emissions is available.

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	14.0	14.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	2.62	2.62	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	5.02	4.63	0.24	28.2	< 0.005	0.05	—	0.05	0.04	—	0.04	—	116	116	< 0.005	< 0.005	—	116
Total	21.6	21.2	0.24	28.2	< 0.005	0.05	—	0.05	0.04	—	0.04	—	116	116	< 0.005	< 0.005	—	116

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	14.0	14.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	2.62	2.62	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	16.6	16.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	2.55	2.55	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.48	0.48	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.68	0.63	0.03	3.80	< 0.005	0.01	—	0.01	0.01	—	0.01	—	14.2	14.2	< 0.005	< 0.005	—	14.2
Total	3.70	3.65	0.03	3.80	< 0.005	0.01	—	0.01	0.01	—	0.01	—	14.2	14.2	< 0.005	< 0.005	—	14.2

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	433	0.00	433	43.3	0.00	—	1,515
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	433	0.00	433	43.3	0.00	—	1,515
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	433	0.00	433	43.3	0.00	—	1,515
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	433	0.00	433	43.3	0.00	—	1,515
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	71.7	0.00	71.7	7.16	0.00	—	251
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	71.7	0.00	71.7	7.16	0.00	—	251

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	58.7	58.7
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	58.7	58.7
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	58.7	58.7
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	58.7	58.7
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9.72	9.72
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9.72	9.72

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.90	0.82	2.29	2.09	< 0.005	0.12	0.00	0.12	0.12	0.00	0.12	0.00	420	420	0.02	< 0.005	0.00	421
Total	0.90	0.82	2.29	2.09	< 0.005	0.12	0.00	0.12	0.12	0.00	0.12	0.00	420	420	0.02	< 0.005	0.00	421
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.90	0.82	2.29	2.09	< 0.005	0.12	0.00	0.12	0.12	0.00	0.12	0.00	420	420	0.02	< 0.005	0.00	421
Total	0.90	0.82	2.29	2.09	< 0.005	0.12	0.00	0.12	0.12	0.00	0.12	0.00	420	420	0.02	< 0.005	0.00	421
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.02	0.02	0.06	0.05	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	9.52	9.52	< 0.005	< 0.005	0.00	9.55
Total	0.02	0.02	0.06	0.05	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	9.52	9.52	< 0.005	< 0.005	0.00	9.55

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipm Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Total all Land Uses	2.00	0.00	0.00	521	48.0	0.00	0.00	12,514

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	971,733	323,911	77,728

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	270

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
General Heavy Industry	0.00	0.00	0.0000	0.0000	0.00
Parking Lot	1,134,836	0.00	0.0000	0.0000	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
General Heavy Industry	0.00	410,620,477
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
General Heavy Industry	803	—
Parking Lot	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
General Heavy Industry	User Defined	User Defined	23,900	0.57	0.05	0.05	30.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
Emergency Generator	Diesel	1.00	1.00	50.0	500	0.73

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	32.8	annual days of extreme heat
Extreme Precipitation	0.00	annual days with precipitation above 20 mm

Sea Level Rise	—	meters of inundation depth
Wildfire	0.19	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A

Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	11.6
AQ-PM	19.1
AQ-DPM	9.09
Drinking Water	30.6
Lead Risk Housing	50.8
Pesticides	90.5
Toxic Releases	7.58
Traffic	3.06
Effect Indicators	—

CleanUp Sites	74.2
Groundwater	77.9
Haz Waste Facilities/Generators	93.2
Impaired Water Bodies	100.0
Solid Waste	86.5
Sensitive Population	—
Asthma	87.6
Cardio-vascular	83.2
Low Birth Weights	26.9
Socioeconomic Factor Indicators	—
Education	82.7
Housing	51.4
Linguistic	88.8
Poverty	94.9
Unemployment	99.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	16.66880534
Employed	7.173104068
Median HI	5.299627871
Education	—
Bachelor's or higher	5.017323239
High school enrollment	16.8741178
Preschool enrollment	68.89516233
Transportation	—

Auto Access	18.40112922
Active commuting	51.10997049
Social	—
2-parent households	13.28114975
Voting	16.79712563
Neighborhood	—
Alcohol availability	70.25535737
Park access	33.85089183
Retail density	4.311561658
Supermarket access	49.58295907
Tree canopy	0.782753753
Housing	—
Homeownership	38.3036058
Housing habitability	30.96368536
Low-inc homeowner severe housing cost burden	26.76761196
Low-inc renter severe housing cost burden	52.89362248
Uncrowded housing	38.58591043
Health Outcomes	—
Insured adults	21.00603105
Arthritis	0.0
Asthma ER Admissions	30.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	41.7

Cognitively Disabled	50.3
Physically Disabled	19.5
Heart Attack ER Admissions	46.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	54.3
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	14.1
Elderly	42.0
English Speaking	18.7
Foreign-born	65.3
Outdoor Workers	5.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	85.8
Traffic Density	4.9
Traffic Access	23.0
Other Indices	—
Hardship	92.9
Other Decision Support	—

2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	82.0
Healthy Places Index Score for Project Location (b)	11.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Operations: Energy Use	Natural gas not anticipated as part of project operations. Substation uses will not themselves generate electricity.
Operations: Water and Waste Water	Water data are based on applicant-provided calculations for the land use. Indoor water not anticipated as part of operations.
Operations: Refrigerants	Assumed 1,000 lbs. of SF6 as part of project operations.
Land Use	Land use data are based on applicant-provided buildout assumptions.
Operations: Landscape Equipment	Assumed 270 summer days for desert region.

Operations: Emergency Generators and Fire Pumps	Assumed 1 back-up generator operating 1 hour/day and 50 hours/year as part of project operations.
Operations: Road Dust	All roads used by future developments projects within the Specific Plan Area would be required to be paved. Per ICAPCD guidance a value of 85% paved is assumed in the modeling to account for the high levels of entrained dust generated from vehicle travel on paved roadways in the region.
Characteristics: Utility Information	GHG intensity factors adjusted per RPS requirements.

Lithium Valley Operation - Phase 2 - Temporary Workforce Housing Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Lithium Valley Operation - Phase 2 - Temporary Workforce Housing
Operational Year	2045
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	4.80
Location	33.18829759139308, -115.6026869228474
County	Imperial
City	Unincorporated
Air District	Imperial County APCD
Air Basin	Salton Sea
TAZ	5600
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Mobile Home Park	1,582	Dwelling Unit	680	983,843	196,769	—	5,632	—
Parking Lot	1,968	1000sqft	45.2	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	49.8	47.5	27.8	289	0.67	1.18	9,451	9,452	1.16	949	950	749	74,286	75,035	77.4	2.72	23.9	77,805
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	39.7	37.8	29.0	132	0.59	1.15	9,451	9,452	1.13	949	950	749	66,851	67,599	77.4	2.81	7.48	70,379
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	45.8	43.7	28.4	216	0.61	1.16	9,017	9,019	1.14	906	907	749	68,099	68,848	77.4	2.69	14.1	71,597
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	8.36	7.98	5.18	39.5	0.11	0.21	1,646	1,646	0.21	165	165	124	11,275	11,398	12.8	0.45	2.33	11,854

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	15.6	14.3	16.7	194	0.60	0.31	9,451	9,451	0.30	949	949	—	60,987	60,987	1.12	2.41	16.9	61,749

Area	33.0	32.6	0.83	90.2	< 0.005	0.04	—	0.04	0.03	—	0.03	0.00	240	240	0.01	< 0.005	—	241
Energy	1.20	0.60	10.3	4.38	0.07	0.83	—	0.83	0.83	—	0.83	—	13,059	13,059	1.16	0.02	—	13,095
Water	—	—	—	—	—	—	—	—	—	—	—	118	0.00	118	12.1	0.29	—	506
Waste	—	—	—	—	—	—	—	—	—	—	—	631	0.00	631	63.0	0.00	—	2,206
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	7.05	7.05
Total	49.8	47.5	27.8	289	0.67	1.18	9,451	9,452	1.16	949	950	749	74,286	75,035	77.4	2.72	23.9	77,805
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	13.7	12.4	18.7	127	0.53	0.31	9,451	9,451	0.30	949	949	—	53,792	53,792	1.15	2.49	0.44	54,564
Area	24.8	24.8	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Energy	1.20	0.60	10.3	4.38	0.07	0.83	—	0.83	0.83	—	0.83	—	13,059	13,059	1.16	0.02	—	13,095
Water	—	—	—	—	—	—	—	—	—	—	—	118	0.00	118	12.1	0.29	—	506
Waste	—	—	—	—	—	—	—	—	—	—	—	631	0.00	631	63.0	0.00	—	2,206
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	7.05	7.05
Total	39.7	37.8	29.0	132	0.59	1.15	9,451	9,452	1.13	949	950	749	66,851	67,599	77.4	2.81	7.48	70,379
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	13.7	12.5	17.5	145	0.54	0.30	9,017	9,018	0.29	906	906	—	54,862	54,862	1.09	2.38	7.05	55,604
Area	30.9	30.6	0.61	66.7	< 0.005	0.03	—	0.03	0.02	—	0.02	0.00	178	178	0.01	< 0.005	—	178
Energy	1.20	0.60	10.3	4.38	0.07	0.83	—	0.83	0.83	—	0.83	—	13,059	13,059	1.16	0.02	—	13,095
Water	—	—	—	—	—	—	—	—	—	—	—	118	0.00	118	12.1	0.29	—	506
Waste	—	—	—	—	—	—	—	—	—	—	—	631	0.00	631	63.0	0.00	—	2,206
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	7.05	7.05
Total	45.8	43.7	28.4	216	0.61	1.16	9,017	9,019	1.14	906	907	749	68,099	68,848	77.4	2.69	14.1	71,597
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	2.50	2.29	3.19	26.5	0.10	0.06	1,646	1,646	0.05	165	165	—	9,083	9,083	0.18	0.39	1.17	9,206
Area	5.64	5.58	0.11	12.2	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	0.00	29.4	29.4	< 0.005	< 0.005	—	29.5
Energy	0.22	0.11	1.88	0.80	0.01	0.15	—	0.15	0.15	—	0.15	—	2,162	2,162	0.19	< 0.005	—	2,168

Water	—	—	—	—	—	—	—	—	—	—	—	19.5	0.00	19.5	2.00	0.05	—	83.8
Waste	—	—	—	—	—	—	—	—	—	—	—	104	0.00	104	10.4	0.00	—	365
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.17	1.17
Total	8.36	7.98	5.18	39.5	0.11	0.21	1,646	1,646	0.21	165	165	124	11,275	11,398	12.8	0.45	2.33	11,854

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile Home Park	15.6	14.3	16.7	194	0.60	0.31	9,451	9,451	0.30	949	949	—	60,987	60,987	1.12	2.41	16.9	61,749
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	15.6	14.3	16.7	194	0.60	0.31	9,451	9,451	0.30	949	949	—	60,987	60,987	1.12	2.41	16.9	61,749
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile Home Park	13.7	12.4	18.7	127	0.53	0.31	9,451	9,451	0.30	949	949	—	53,792	53,792	1.15	2.49	0.44	54,564
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	13.7	12.4	18.7	127	0.53	0.31	9,451	9,451	0.30	949	949	—	53,792	53,792	1.15	2.49	0.44	54,564
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Mobile Home Park	2.50	2.29	3.19	26.5	0.10	0.06	1,646	1,646	0.05	165	165	—	9,083	9,083	0.18	0.39	1.17	9,206
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	2.50	2.29	3.19	26.5	0.10	0.06	1,646	1,646	0.05	165	165	—	9,083	9,083	0.18	0.39	1.17	9,206

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile Home Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile Home Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Mobile Home Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile Home Park	1.20	0.60	10.3	4.38	0.07	0.83	—	0.83	0.83	—	0.83	—	13,059	13,059	1.16	0.02	—	13,095
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	1.20	0.60	10.3	4.38	0.07	0.83	—	0.83	0.83	—	0.83	—	13,059	13,059	1.16	0.02	—	13,095
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile Home Park	1.20	0.60	10.3	4.38	0.07	0.83	—	0.83	0.83	—	0.83	—	13,059	13,059	1.16	0.02	—	13,095
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	1.20	0.60	10.3	4.38	0.07	0.83	—	0.83	0.83	—	0.83	—	13,059	13,059	1.16	0.02	—	13,095
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile Home Park	0.22	0.11	1.88	0.80	0.01	0.15	—	0.15	0.15	—	0.15	—	2,162	2,162	0.19	< 0.005	—	2,168

Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.22	0.11	1.88	0.80	0.01	0.15	—	0.15	0.15	—	0.15	—	2,162	2,162	0.19	< 0.005	—	2,168

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	21.2	21.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	3.60	3.60	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	8.23	7.80	0.83	90.2	< 0.005	0.04	—	0.04	0.03	—	0.03	—	240	240	0.01	< 0.005	—	241
Total	33.0	32.6	0.83	90.2	< 0.005	0.04	—	0.04	0.03	—	0.03	0.00	240	240	0.01	< 0.005	—	241
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	21.2	21.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architectural	3.60	3.60	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	24.8	24.8	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	3.87	3.87	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.66	0.66	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	1.11	1.05	0.11	12.2	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	29.4	29.4	< 0.005	< 0.005	—	29.5
Total	5.64	5.58	0.11	12.2	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	0.00	29.4	29.4	< 0.005	< 0.005	—	29.5

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile Home Park	—	—	—	—	—	—	—	—	—	—	—	118	0.00	118	12.1	0.29	—	506
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	118	0.00	118	12.1	0.29	—	506

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile Home Park	—	—	—	—	—	—	—	—	—	—	—	118	0.00	118	12.1	0.29	—	506
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	118	0.00	118	12.1	0.29	—	506
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile Home Park	—	—	—	—	—	—	—	—	—	—	—	19.5	0.00	19.5	2.00	0.05	—	83.8
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	19.5	0.00	19.5	2.00	0.05	—	83.8

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile Home Park	—	—	—	—	—	—	—	—	—	—	—	631	0.00	631	63.0	0.00	—	2,206
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	631	0.00	631	63.0	0.00	—	2,206

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile Home Park	—	—	—	—	—	—	—	—	—	—	—	631	0.00	631	63.0	0.00	—	2,206
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	631	0.00	631	63.0	0.00	—	2,206
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile Home Park	—	—	—	—	—	—	—	—	—	—	—	104	0.00	104	10.4	0.00	—	365
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	104	0.00	104	10.4	0.00	—	365

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile Home Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	7.05	7.05
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	7.05	7.05
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Mobile Home Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	7.05	7.05
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	7.05	7.05
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile Home Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.17	1.17
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.17	1.17

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipm Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Remove	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Mobile Home Park	5,379	4,952	4,556	1,898,095	84,191	77,506	71,315	29,709,805
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Mobile Home Park	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	486
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0

Pellet Wood Stoves	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
1992282.70275	664,094	0.00	0.00	118,061

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	270

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Mobile Home Park	10,817,725	0.00	0.0000	0.0000	40,748,067
Parking Lot	1,723,696	0.00	0.0000	0.0000	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Mobile Home Park	61,592,985	4,275,476
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Mobile Home Park	1,170	—
Parking Lot	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Mobile Home Park	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Mobile Home Park	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit

Temperature and Extreme Heat	32.8	annual days of extreme heat
Extreme Precipitation	0.00	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.19	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	11.6
AQ-PM	19.1
AQ-DPM	9.09
Drinking Water	30.6
Lead Risk Housing	50.8
Pesticides	90.5
Toxic Releases	7.58

Traffic	3.06
Effect Indicators	—
CleanUp Sites	74.2
Groundwater	77.9
Haz Waste Facilities/Generators	93.2
Impaired Water Bodies	100.0
Solid Waste	86.5
Sensitive Population	—
Asthma	87.6
Cardio-vascular	83.2
Low Birth Weights	26.9
Socioeconomic Factor Indicators	—
Education	82.7
Housing	51.4
Linguistic	88.8
Poverty	94.9
Unemployment	99.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	16.66880534
Employed	7.173104068
Median HI	5.299627871
Education	—
Bachelor's or higher	5.017323239
High school enrollment	16.8741178

Preschool enrollment	68.89516233
Transportation	—
Auto Access	18.40112922
Active commuting	51.10997049
Social	—
2-parent households	13.28114975
Voting	16.79712563
Neighborhood	—
Alcohol availability	70.25535737
Park access	33.85089183
Retail density	4.311561658
Supermarket access	49.58295907
Tree canopy	0.782753753
Housing	—
Homeownership	38.3036058
Housing habitability	30.96368536
Low-inc homeowner severe housing cost burden	26.76761196
Low-inc renter severe housing cost burden	52.89362248
Uncrowded housing	38.58591043
Health Outcomes	—
Insured adults	21.00603105
Arthritis	0.0
Asthma ER Admissions	30.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0

Diagnosed Diabetes	0.0
Life Expectancy at Birth	41.7
Cognitively Disabled	50.3
Physically Disabled	19.5
Heart Attack ER Admissions	46.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	54.3
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	14.1
Elderly	42.0
English Speaking	18.7
Foreign-born	65.3
Outdoor Workers	5.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	85.8
Traffic Density	4.9
Traffic Access	23.0
Other Indices	—

Hardship	92.9
Other Decision Support	—
2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	82.0
Healthy Places Index Score for Project Location (b)	11.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Land use data are based on applicant-provided buildout assumptions.
Operations: Landscape Equipment	Assumed 270 summer days for desert region.
Operations: Vehicle Data	Trip rates are based on ITE Land Use Code 240.

Operations: Road Dust	All roads used by future developments projects within the Specific Plan Area would be required to be paved. Per ICAPCD guidance a value of 85% paved is assumed in the modeling to account for the high levels of entrained dust generated from vehicle travel on paved roadways in the region.
Operations: Hearths	Temporary housing not anticipated to provide hearths or fireplaces.
Operations: Energy Use	Land use is not anticipated to incorporate the use of natural gas. Default natural gas consumption was converted to electricity.
Operations: Water and Waste Water	Water data are based on applicant-provided calculations for the land use.
Characteristics: Utility Information	GHG intensity factors adjusted per RPS requirements.

Lithium Valley Operation - Phase 2 - Wastewater Treatment Plant Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Lithium Valley Operation - Phase 2 - Wastewater Treatment Plant
Operational Year	2045
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	4.80
Location	33.18829759139308, -115.6026869228474
County	Imperial
City	Unincorporated
Air District	Imperial County APCD
Air Basin	Salton Sea
TAZ	5600
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
General Heavy Industry	361	1000sqft	228	361,442	72,288	—	—	—
Parking Lot	723	1000sqft	16.6	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	46.2	42.7	74.7	376	1.11	2.26	16,595	16,597	2.22	1,666	1,669	492	115,541	116,033	52.2	4.74	124	118,873
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	40.7	37.5	77.9	241	0.99	2.23	16,595	16,597	2.20	1,666	1,669	492	102,835	103,327	52.2	4.90	94.9	106,186
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	27.8	25.8	29.9	194	0.70	0.84	11,354	11,355	0.81	1,140	1,141	492	73,295	73,787	51.4	3.52	103	76,225
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	5.07	4.72	5.46	35.5	0.13	0.15	2,072	2,072	0.15	208	208	81.4	12,135	12,216	8.52	0.58	17.0	12,620

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	23.0	20.9	27.3	332	1.05	0.55	16,595	16,595	0.52	1,666	1,667	—	106,676	106,676	1.82	4.08	29.7	107,968

Area	12.1	11.8	0.13	15.7	< 0.005	0.03	—	0.03	0.02	—	0.02	—	64.6	64.6	< 0.005	< 0.005	—	64.9
Energy	0.35	0.17	3.15	2.65	0.02	0.24	—	0.24	0.24	—	0.24	—	3,763	3,763	0.33	0.01	—	3,773
Water	—	—	—	—	—	—	—	—	—	—	—	250	0.00	250	25.7	0.61	—	1,074
Waste	—	—	—	—	—	—	—	—	—	—	—	242	0.00	242	24.1	0.00	—	845
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	94.1	94.1
Stationary	10.8	9.85	44.0	25.1	0.05	1.45	0.00	1.45	1.45	0.00	1.45	0.00	5,037	5,037	0.20	0.04	0.00	5,054
Total	46.2	42.7	74.7	376	1.11	2.26	16,595	16,597	2.22	1,666	1,669	492	115,541	116,033	52.2	4.74	124	118,873
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	20.3	18.2	30.8	213	0.92	0.55	16,595	16,595	0.52	1,666	1,667	—	94,035	94,035	1.84	4.24	0.77	95,346
Area	9.25	9.25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.35	0.17	3.15	2.65	0.02	0.24	—	0.24	0.24	—	0.24	—	3,763	3,763	0.33	0.01	—	3,773
Water	—	—	—	—	—	—	—	—	—	—	—	250	0.00	250	25.7	0.61	—	1,074
Waste	—	—	—	—	—	—	—	—	—	—	—	242	0.00	242	24.1	0.00	—	845
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	94.1	94.1
Stationary	10.8	9.85	44.0	25.1	0.05	1.45	0.00	1.45	1.45	0.00	1.45	0.00	5,037	5,037	0.20	0.04	0.00	5,054
Total	40.7	37.5	77.9	241	0.99	2.23	16,595	16,597	2.20	1,666	1,669	492	102,835	103,327	52.2	4.90	94.9	106,186
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	14.6	13.2	20.6	177	0.67	0.38	11,354	11,355	0.36	1,140	1,141	—	68,794	68,794	1.26	2.90	8.88	69,698
Area	11.3	11.2	0.10	11.6	< 0.005	0.02	—	0.02	0.02	—	0.02	—	47.8	47.8	< 0.005	< 0.005	—	48.0
Energy	0.35	0.17	3.15	2.65	0.02	0.24	—	0.24	0.24	—	0.24	—	3,763	3,763	0.33	0.01	—	3,773
Water	—	—	—	—	—	—	—	—	—	—	—	250	0.00	250	25.7	0.61	—	1,074
Waste	—	—	—	—	—	—	—	—	—	—	—	242	0.00	242	24.1	0.00	—	845
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	94.1	94.1
Stationary	1.48	1.35	6.03	3.44	0.01	0.20	0.00	0.20	0.20	0.00	0.20	0.00	690	690	0.03	0.01	0.00	692
Total	27.8	25.8	29.9	194	0.70	0.84	11,354	11,355	0.81	1,140	1,141	492	73,295	73,787	51.4	3.52	103	76,225

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	2.67	2.40	3.76	32.2	0.12	0.07	2,072	2,072	0.07	208	208	—	11,390	11,390	0.21	0.48	1.47	11,539
Area	2.07	2.04	0.02	2.12	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.92	7.92	< 0.005	< 0.005	—	7.95
Energy	0.06	0.03	0.58	0.48	< 0.005	0.04	—	0.04	0.04	—	0.04	—	623	623	0.06	< 0.005	—	625
Water	—	—	—	—	—	—	—	—	—	—	—	41.5	0.00	41.5	4.25	0.10	—	178
Waste	—	—	—	—	—	—	—	—	—	—	—	40.0	0.00	40.0	4.00	0.00	—	140
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15.6	15.6
Stationary	0.27	0.25	1.10	0.63	< 0.005	0.04	0.00	0.04	0.04	0.00	0.04	0.00	114	114	< 0.005	< 0.005	0.00	115
Total	5.07	4.72	5.46	35.5	0.13	0.15	2,072	2,072	0.15	208	208	81.4	12,135	12,216	8.52	0.58	17.0	12,620

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	23.0	20.9	27.3	332	1.05	0.55	16,595	16,595	0.52	1,666	1,667	—	106,676	106,676	1.82	4.08	29.7	107,968
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	23.0	20.9	27.3	332	1.05	0.55	16,595	16,595	0.52	1,666	1,667	—	106,676	106,676	1.82	4.08	29.7	107,968
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	20.3	18.2	30.8	213	0.92	0.55	16,595	16,595	0.52	1,666	1,667	—	94,035	94,035	1.84	4.24	0.77	95,346
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	20.3	18.2	30.8	213	0.92	0.55	16,595	16,595	0.52	1,666	1,667	—	94,035	94,035	1.84	4.24	0.77	95,346
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	2.67	2.40	3.76	32.2	0.12	0.07	2,072	2,072	0.07	208	208	—	11,390	11,390	0.21	0.48	1.47	11,539
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	2.67	2.40	3.76	32.2	0.12	0.07	2,072	2,072	0.07	208	208	—	11,390	11,390	0.21	0.48	1.47	11,539

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.35	0.17	3.15	2.65	0.02	0.24	—	0.24	0.24	—	0.24	—	3,763	3,763	0.33	0.01	—	3,773
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.35	0.17	3.15	2.65	0.02	0.24	—	0.24	0.24	—	0.24	—	3,763	3,763	0.33	0.01	—	3,773
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.35	0.17	3.15	2.65	0.02	0.24	—	0.24	0.24	—	0.24	—	3,763	3,763	0.33	0.01	—	3,773

Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.35	0.17	3.15	2.65	0.02	0.24	—	0.24	0.24	—	0.24	—	3,763	3,763	0.33	0.01	—	3,773
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.06	0.03	0.58	0.48	< 0.005	0.04	—	0.04	0.04	—	0.04	—	623	623	0.06	< 0.005	—	625
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.06	0.03	0.58	0.48	< 0.005	0.04	—	0.04	0.04	—	0.04	—	623	623	0.06	< 0.005	—	625

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	7.79	7.79	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	1.46	1.46	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	2.80	2.58	0.13	15.7	< 0.005	0.03	—	0.03	0.02	—	0.02	—	64.6	64.6	< 0.005	< 0.005	—	64.9
Total	12.1	11.8	0.13	15.7	< 0.005	0.03	—	0.03	0.02	—	0.02	—	64.6	64.6	< 0.005	< 0.005	—	64.9
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Consum Products	7.79	7.79	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	1.46	1.46	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	9.25	9.25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	1.42	1.42	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.27	0.27	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.38	0.35	0.02	2.12	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.92	7.92	< 0.005	< 0.005	—	7.95
Total	2.07	2.04	0.02	2.12	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.92	7.92	< 0.005	< 0.005	—	7.95

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	250	0.00	250	25.7	0.61	—	1,074

Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	250	0.00	250	25.7	0.61	—	1,074
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	250	0.00	250	25.7	0.61	—	1,074
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	250	0.00	250	25.7	0.61	—	1,074
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	41.5	0.00	41.5	4.25	0.10	—	178
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	41.5	0.00	41.5	4.25	0.10	—	178

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	242	0.00	242	24.1	0.00	—	845
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Total	—	—	—	—	—	—	—	—	—	—	—	242	0.00	242	24.1	0.00	—	845
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	242	0.00	242	24.1	0.00	—	845
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	242	0.00	242	24.1	0.00	—	845
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	40.0	0.00	40.0	4.00	0.00	—	140
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	40.0	0.00	40.0	4.00	0.00	—	140

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	94.1	94.1
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	94.1	94.1
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	94.1	94.1
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	94.1	94.1
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15.6	15.6
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15.6	15.6

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipm Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	10.8	9.85	44.0	25.1	0.05	1.45	0.00	1.45	1.45	0.00	1.45	0.00	5,037	5,037	0.20	0.04	0.00	5,054
Total	10.8	9.85	44.0	25.1	0.05	1.45	0.00	1.45	1.45	0.00	1.45	0.00	5,037	5,037	0.20	0.04	0.00	5,054
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	10.8	9.85	44.0	25.1	0.05	1.45	0.00	1.45	1.45	0.00	1.45	0.00	5,037	5,037	0.20	0.04	0.00	5,054
Total	10.8	9.85	44.0	25.1	0.05	1.45	0.00	1.45	1.45	0.00	1.45	0.00	5,037	5,037	0.20	0.04	0.00	5,054
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.27	0.25	1.10	0.63	< 0.005	0.04	0.00	0.04	0.04	0.00	0.04	0.00	114	114	< 0.005	< 0.005	0.00	115
Total	0.27	0.25	1.10	0.63	< 0.005	0.04	0.00	0.04	0.04	0.00	0.04	0.00	114	114	< 0.005	< 0.005	0.00	115

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Remove	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
General Heavy Industry	4,442	7,258	5,754	1,836,603	90,480	147,831	117,205	37,409,305
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	542,163	180,721	43,373

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	270

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
General Heavy Industry	10,978,593	0.00	0.0000	0.0000	11,741,300
Parking Lot	633,246	0.00	0.0000	0.0000	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
General Heavy Industry	130,659,770	2,313,147
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
General Heavy Industry	448	—
Parking Lot	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
General Heavy Industry	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
Emergency Generator	Diesel	4.00	1.00	50.0	1,500	0.73

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	32.8	annual days of extreme heat
Extreme Precipitation	0.00	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.19	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A

Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	11.6
AQ-PM	19.1
AQ-DPM	9.09
Drinking Water	30.6
Lead Risk Housing	50.8
Pesticides	90.5
Toxic Releases	7.58
Traffic	3.06
Effect Indicators	—
CleanUp Sites	74.2
Groundwater	77.9

Haz Waste Facilities/Generators	93.2
Impaired Water Bodies	100.0
Solid Waste	86.5
Sensitive Population	—
Asthma	87.6
Cardio-vascular	83.2
Low Birth Weights	26.9
Socioeconomic Factor Indicators	—
Education	82.7
Housing	51.4
Linguistic	88.8
Poverty	94.9
Unemployment	99.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	16.66880534
Employed	7.173104068
Median HI	5.299627871
Education	—
Bachelor's or higher	5.017323239
High school enrollment	16.8741178
Preschool enrollment	68.89516233
Transportation	—
Auto Access	18.40112922
Active commuting	51.10997049

Social	—
2-parent households	13.28114975
Voting	16.79712563
Neighborhood	—
Alcohol availability	70.25535737
Park access	33.85089183
Retail density	4.311561658
Supermarket access	49.58295907
Tree canopy	0.782753753
Housing	—
Homeownership	38.3036058
Housing habitability	30.96368536
Low-inc homeowner severe housing cost burden	26.76761196
Low-inc renter severe housing cost burden	52.89362248
Uncrowded housing	38.58591043
Health Outcomes	—
Insured adults	21.00603105
Arthritis	0.0
Asthma ER Admissions	30.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	41.7
Cognitively Disabled	50.3
Physically Disabled	19.5

Heart Attack ER Admissions	46.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	54.3
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	14.1
Elderly	42.0
English Speaking	18.7
Foreign-born	65.3
Outdoor Workers	5.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	85.8
Traffic Density	4.9
Traffic Access	23.0
Other Indices	—
Hardship	92.9
Other Decision Support	—
2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	82.0
Healthy Places Index Score for Project Location (b)	11.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Land use data are based on applicant-provided buildout assumptions.
Operations: Vehicle Data	Trip rates are based on ITE Land Use Code 170.
Operations: Landscape Equipment	Assumed 270 summer days for desert region.
Operations: Emergency Generators and Fire Pumps	Assumed 4 back-up generators operating 1 hour/day and 50 hours/year for maintenance and testing.
Operations: Road Dust	All roads used by future developments projects within the Specific Plan Area would be required to be paved. Per ICAPCD guidance a value of 85% paved is assumed in the modeling to account for the high levels of entrained dust generated from vehicle travel on paved roadways in the region.
Operations: Water and Waste Water	Water data are based on applicant-provided calculations for the land use.

Characteristics: Utility Information	GHG intensity factors adjusted per RPS requirements.

Lithium Valley Operation - Phase 2 - Water Storage Facility Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Lithium Valley Operation - Phase 2 - Water Storage Facility
Operational Year	2045
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	4.80
Location	33.18829759139308, -115.6026869228474
County	Imperial
City	Unincorporated
Air District	Imperial County APCD
Air Basin	Salton Sea
TAZ	5600
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Parking Lot	1,743	1000sqft	40.0	0.00	34,853	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.34	0.34	0.01	0.11	< 0.005	< 0.005	5.39	5.39	< 0.005	0.54	0.54	0.00	34.6	34.6	< 0.005	< 0.005	0.01	35.0
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.34	0.34	0.01	0.07	< 0.005	< 0.005	5.39	5.39	< 0.005	0.54	0.54	0.00	30.5	30.5	< 0.005	< 0.005	< 0.005	30.9
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.34	0.34	0.01	0.06	< 0.005	< 0.005	3.80	3.80	< 0.005	0.38	0.38	0.00	23.0	23.0	< 0.005	< 0.005	< 0.005	23.3
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.06	0.06	< 0.005	0.01	< 0.005	< 0.005	0.69	0.69	< 0.005	0.07	0.07	0.00	3.80	3.80	< 0.005	< 0.005	< 0.005	3.85

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.01	0.01	0.01	0.11	< 0.005	< 0.005	5.39	5.39	< 0.005	0.54	0.54	—	34.6	34.6	< 0.005	< 0.005	0.01	35.0

Area	0.34	0.34	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.34	0.34	0.01	0.11	< 0.005	< 0.005	5.39	5.39	< 0.005	0.54	0.54	0.00	34.6	34.6	< 0.005	< 0.005	0.01	35.0
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.01	0.01	0.01	0.07	< 0.005	< 0.005	5.39	5.39	< 0.005	0.54	0.54	—	30.5	30.5	< 0.005	< 0.005	< 0.005	30.9
Area	0.34	0.34	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.34	0.34	0.01	0.07	< 0.005	< 0.005	5.39	5.39	< 0.005	0.54	0.54	0.00	30.5	30.5	< 0.005	< 0.005	< 0.005	30.9
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	< 0.005	< 0.005	0.01	0.06	< 0.005	< 0.005	3.80	3.80	< 0.005	0.38	0.38	—	23.0	23.0	< 0.005	< 0.005	< 0.005	23.3
Area	0.34	0.34	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.34	0.34	0.01	0.06	< 0.005	< 0.005	3.80	3.80	< 0.005	0.38	0.38	0.00	23.0	23.0	< 0.005	< 0.005	< 0.005	23.3
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	0.69	0.69	< 0.005	0.07	0.07	—	3.80	3.80	< 0.005	< 0.005	< 0.005	3.85
Area	0.06	0.06	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.06	0.06	< 0.005	0.01	< 0.005	< 0.005	0.69	0.69	< 0.005	0.07	0.07	0.00	3.80	3.80	< 0.005	< 0.005	< 0.005	3.85

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Mobile source emissions results are presented in Sections 2.6. No further detailed breakdown of emissions is available.

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
undefined	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

undefine	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
undefined	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.14	0.14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.20	0.20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.34	0.34	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.14	0.14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.20	0.20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.34	0.34	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.03	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architect Coatings	0.04	0.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.06	0.06	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Pumps	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Pumps	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Pumps	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Total all Land Uses	2.00	0.00	0.00	521	48.0	0.00	0.00	12,514

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	0.00	0.00	104,560

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00

Summer Days	day/yr	270

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Parking Lot	1,526,576	0.00	0.0000	0.0000	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Parking Lot	0.00	425,446,394

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Parking Lot	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Pumps	Electric	Average	6.00	8.00	500	0.74

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	32.8	annual days of extreme heat
Extreme Precipitation	0.00	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.19	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A

Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	11.6
AQ-PM	19.1
AQ-DPM	9.09
Drinking Water	30.6
Lead Risk Housing	50.8
Pesticides	90.5
Toxic Releases	7.58
Traffic	3.06
Effect Indicators	—
CleanUp Sites	74.2
Groundwater	77.9
Haz Waste Facilities/Generators	93.2
Impaired Water Bodies	100.0
Solid Waste	86.5
Sensitive Population	—
Asthma	87.6
Cardio-vascular	83.2
Low Birth Weights	26.9
Socioeconomic Factor Indicators	—
Education	82.7
Housing	51.4
Linguistic	88.8
Poverty	94.9
Unemployment	99.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	16.66880534
Employed	7.173104068
Median HI	5.299627871
Education	—
Bachelor's or higher	5.017323239
High school enrollment	16.8741178
Preschool enrollment	68.89516233
Transportation	—
Auto Access	18.40112922
Active commuting	51.10997049
Social	—
2-parent households	13.28114975
Voting	16.79712563
Neighborhood	—
Alcohol availability	70.25535737
Park access	33.85089183
Retail density	4.311561658
Supermarket access	49.58295907
Tree canopy	0.782753753
Housing	—
Homeownership	38.3036058
Housing habitability	30.96368536
Low-inc homeowner severe housing cost burden	26.76761196
Low-inc renter severe housing cost burden	52.89362248

Uncrowded housing	38.58591043
Health Outcomes	—
Insured adults	21.00603105
Arthritis	0.0
Asthma ER Admissions	30.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	41.7
Cognitively Disabled	50.3
Physically Disabled	19.5
Heart Attack ER Admissions	46.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	54.3
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0

Children	14.1
Elderly	42.0
English Speaking	18.7
Foreign-born	65.3
Outdoor Workers	5.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	85.8
Traffic Density	4.9
Traffic Access	23.0
Other Indices	—
Hardship	92.9
Other Decision Support	—
2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	82.0
Healthy Places Index Score for Project Location (b)	11.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Land use data are based on applicant-provided buildout assumptions.
Operations: Vehicle Data	Trip rates are based on ITE Land Use Code 760.
Operations: Landscape Equipment	Assumed 270 summer days for desert region.
Operations: Off-Road Equipment	Assumed pumps as part of project operations.
Operations: Road Dust	All roads used by future developments projects within the Specific Plan Area would be required to be paved. Per ICAPCD guidance a value of 85% paved is assumed in the modeling to account for the high levels of entrained dust generated from vehicle travel on paved roadways in the region.
Operations: Water and Waste Water	Water data are based on applicant-provided calculations for the land use.
Characteristics: Utility Information	GHG intensity factors adjusted per RPS requirements.

Lithium Valley Operation - Phase 2 - Wholesale Distribution Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Lithium Valley Operation - Phase 2 - Wholesale Distribution
Operational Year	2045
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	4.80
Location	33.18829759139308, -115.6026869228474
County	Imperial
City	Unincorporated
Air District	Imperial County APCD
Air Basin	Salton Sea
TAZ	5600
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Unrefrigerated Warehouse-No Rail	2,116	1000sqft	944	2,115,733	1,057,866	—	—	passenger vehicles

Unrefrigerated Warehouse-Rail	803	1000sqft	377	802,519	401,260	—	—	trucks
Refrigerated Warehouse-No Rail	285	1000sqft	134	284,787	142,384	—	—	passenger vehicles
Refrigerated Warehouse-Rail	230	1000sqft	108	230,199	115,099	—	—	trucks
Parking Lot	17,166	1000sqft	394	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	130	126	130	353	1.72	4.56	15,687	15,692	4.39	1,577	1,581	1,907	188,883	190,791	194	17.9	13,782	214,769
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	103	101	139	132	1.63	4.30	15,687	15,692	4.19	1,577	1,581	1,907	180,498	182,405	194	18.0	13,726	206,351
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	120	116	130	260	1.66	4.08	15,482	15,486	3.92	1,556	1,560	1,907	182,688	184,595	194	18.0	13,749	208,550
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	21.9	21.2	23.8	47.5	0.30	0.74	2,825	2,826	0.72	284	285	316	30,246	30,562	32.1	2.98	2,276	34,528

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	8.46	7.35	102	181	1.59	2.48	15,687	15,690	2.37	1,577	1,579	—	165,649	165,649	0.97	17.5	57.7	170,939
Area	116	114	1.26	149	0.01	0.27	—	0.27	0.20	—	0.20	—	614	614	0.03	0.01	—	616
Energy	1.93	0.97	17.6	14.7	0.11	1.33	—	1.33	1.33	—	1.33	—	20,941	20,941	1.85	0.04	—	20,999
Water	—	—	—	—	—	—	—	—	—	—	—	168	0.00	168	17.2	0.41	—	721
Waste	—	—	—	—	—	—	—	—	—	—	—	1,739	0.00	1,739	174	0.00	—	6,085
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13,725	13,725
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	3.61	3.28	9.17	8.37	0.02	0.48	0.00	0.48	0.48	0.00	0.48	0.00	1,679	1,679	0.07	0.01	0.00	1,685
Total	130	126	130	353	1.72	4.56	15,687	15,692	4.39	1,577	1,581	1,907	188,883	190,791	194	17.9	13,782	214,769
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	7.65	6.58	112	109	1.51	2.48	15,687	15,690	2.37	1,577	1,579	—	157,878	157,878	0.99	17.6	1.50	163,137
Area	89.9	89.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	1.93	0.97	17.6	14.7	0.11	1.33	—	1.33	1.33	—	1.33	—	20,941	20,941	1.85	0.04	—	20,999
Water	—	—	—	—	—	—	—	—	—	—	—	168	0.00	168	17.2	0.41	—	721
Waste	—	—	—	—	—	—	—	—	—	—	—	1,739	0.00	1,739	174	0.00	—	6,085
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13,725	13,725
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	3.61	3.28	9.17	8.37	0.02	0.48	0.00	0.48	0.48	0.00	0.48	0.00	1,679	1,679	0.07	0.01	0.00	1,685
Total	103	101	139	132	1.63	4.30	15,687	15,692	4.19	1,577	1,581	1,907	180,498	182,405	194	18.0	13,726	206,351

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	7.88	6.80	110	134	1.54	2.48	15,482	15,484	2.37	1,556	1,559	—	161,063	161,063	0.97	17.5	24.9	166,334
Area	110	108	0.93	110	0.01	0.20	—	0.20	0.15	—	0.15	—	454	454	0.02	< 0.005	—	456
Energy	1.93	0.97	17.6	14.7	0.11	1.33	—	1.33	1.33	—	1.33	—	20,941	20,941	1.85	0.04	—	20,999
Water	—	—	—	—	—	—	—	—	—	—	—	168	0.00	168	17.2	0.41	—	721
Waste	—	—	—	—	—	—	—	—	—	—	—	1,739	0.00	1,739	174	0.00	—	6,085
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13,725	13,725
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	0.49	0.45	1.26	1.15	< 0.005	0.07	0.00	0.07	0.07	0.00	0.07	0.00	230	230	0.01	< 0.005	0.00	231
Total	120	116	130	260	1.66	4.08	15,482	15,486	3.92	1,556	1,560	1,907	182,688	184,595	194	18.0	13,749	208,550
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.44	1.24	20.2	24.5	0.28	0.45	2,825	2,826	0.43	284	284	—	26,666	26,666	0.16	2.90	4.13	27,539
Area	20.0	19.7	0.17	20.2	< 0.005	0.04	—	0.04	0.03	—	0.03	—	75.2	75.2	< 0.005	< 0.005	—	75.5
Energy	0.35	0.18	3.20	2.69	0.02	0.24	—	0.24	0.24	—	0.24	—	3,467	3,467	0.31	0.01	—	3,477
Water	—	—	—	—	—	—	—	—	—	—	—	27.8	0.00	27.8	2.85	0.07	—	119
Waste	—	—	—	—	—	—	—	—	—	—	—	288	0.00	288	28.8	0.00	—	1,007
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2,272	2,272
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	0.09	0.08	0.23	0.21	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	38.1	38.1	< 0.005	< 0.005	0.00	38.2
Total	21.9	21.2	23.8	47.5	0.30	0.74	2,825	2,826	0.72	284	285	316	30,246	30,562	32.1	2.98	2,276	34,528

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	4.89	4.56	3.98	139	0.46	0.08	8,097	8,097	0.07	813	813	—	46,624	46,624	0.39	0.63	9.09	46,831
Unrefrigerated Warehouse-Rail	2.26	1.70	75.6	17.8	0.83	1.86	5,052	5,054	1.78	509	511	—	87,617	87,617	0.42	13.0	36.9	91,545
Refrigerated Warehouse-No Rail	0.66	0.61	0.54	18.7	0.06	0.01	1,090	1,090	0.01	109	109	—	6,276	6,276	0.05	0.09	1.22	6,304
Refrigerated Warehouse-Rail	0.65	0.49	21.7	5.10	0.24	0.53	1,449	1,450	0.51	146	146	—	25,133	25,133	0.12	3.74	10.6	26,259
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	8.46	7.35	102	181	1.59	2.48	15,687	15,690	2.37	1,577	1,579	—	165,649	165,649	0.97	17.5	57.7	170,939
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	4.32	4.00	4.49	75.5	0.39	0.08	8,097	8,097	0.07	813	813	—	39,728	39,728	0.40	0.70	0.24	39,945

Unrefrigerated	2.14	1.59	83.4	18.0	0.83	1.86	5,052	5,054	1.78	509	511	—	87,658	87,658	0.41	13.0	0.96	91,553
Refrigerated Warehouse-No Rail	0.58	0.54	0.60	10.2	0.05	0.01	1,090	1,090	0.01	109	109	—	5,348	5,348	0.05	0.09	0.03	5,377
Refrigerated Warehouse-Rail	0.61	0.46	23.9	5.17	0.24	0.53	1,449	1,450	0.51	146	146	—	25,144	25,144	0.12	3.74	0.27	26,262
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	7.65	6.58	112	109	1.51	2.48	15,687	15,690	2.37	1,577	1,579	—	157,878	157,878	0.99	17.6	1.50	163,137
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.81	0.75	0.78	17.9	0.08	0.01	1,458	1,458	0.01	146	146	—	7,047	7,047	0.06	0.11	0.65	7,082
Unrefrigerated Warehouse-Rail	0.40	0.30	15.0	3.26	0.15	0.34	910	910	0.32	91.7	92.0	—	14,509	14,509	0.07	2.16	2.64	15,156
Refrigerated Warehouse-No Rail	0.11	0.10	0.10	2.40	0.01	< 0.005	196	196	< 0.005	19.7	19.7	—	949	949	0.01	0.01	0.09	953
Refrigerated Warehouse-Rail	0.12	0.09	4.30	0.94	0.04	0.10	261	261	0.09	26.3	26.4	—	4,162	4,162	0.02	0.62	0.76	4,347
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	1.44	1.24	20.2	24.5	0.28	0.45	2,825	2,826	0.43	284	284	—	26,666	26,666	0.16	2.90	4.13	27,539

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Unrefrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Refrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
undefined	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unrefrigerated	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Unrefrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Refrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
undefined	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Unrefrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Refrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
undefined	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	1.19	0.60	10.8	9.11	0.07	0.82	—	0.82	0.82	—	0.82	—	12,942	12,942	1.15	0.02	—	12,978
Unrefrigerated Warehouse-Rail	0.45	0.23	4.11	3.46	0.02	0.31	—	0.31	0.31	—	0.31	—	4,909	4,909	0.43	0.01	—	4,923
Refrigerated Warehouse-No Rail	0.16	0.08	1.43	1.20	0.01	0.11	—	0.11	0.11	—	0.11	—	1,709	1,709	0.15	< 0.005	—	1,714
Refrigerated Warehouse-Rail	0.13	0.06	1.16	0.97	0.01	0.09	—	0.09	0.09	—	0.09	—	1,381	1,381	0.12	< 0.005	—	1,385
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Total	1.93	0.97	17.6	14.7	0.11	1.33	—	1.33	1.33	—	1.33	—	20,941	20,941	1.85	0.04	—	20,999
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	1.19	0.60	10.8	9.11	0.07	0.82	—	0.82	0.82	—	0.82	—	12,942	12,942	1.15	0.02	—	12,978
Unrefrigerated Warehouse-Rail	0.45	0.23	4.11	3.46	0.02	0.31	—	0.31	0.31	—	0.31	—	4,909	4,909	0.43	0.01	—	4,923
Refrigerated Warehouse-No Rail	0.16	0.08	1.43	1.20	0.01	0.11	—	0.11	0.11	—	0.11	—	1,709	1,709	0.15	< 0.005	—	1,714
Refrigerated Warehouse-Rail	0.13	0.06	1.16	0.97	0.01	0.09	—	0.09	0.09	—	0.09	—	1,381	1,381	0.12	< 0.005	—	1,385
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	1.93	0.97	17.6	14.7	0.11	1.33	—	1.33	1.33	—	1.33	—	20,941	20,941	1.85	0.04	—	20,999
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.22	0.11	1.98	1.66	0.01	0.15	—	0.15	0.15	—	0.15	—	2,143	2,143	0.19	< 0.005	—	2,149
Unrefrigerated Warehouse-Rail	0.08	0.04	0.75	0.63	< 0.005	0.06	—	0.06	0.06	—	0.06	—	813	813	0.07	< 0.005	—	815

Refrigerated Warehouse-No	0.03	0.01	0.26	0.22	< 0.005	0.02	—	0.02	0.02	—	0.02	—	283	283	0.03	< 0.005	—	284
Refrigerated Warehouse-Rail	0.02	0.01	0.21	0.18	< 0.005	0.02	—	0.02	0.02	—	0.02	—	229	229	0.02	< 0.005	—	229
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.35	0.18	3.20	2.69	0.02	0.24	—	0.24	0.24	—	0.24	—	3,467	3,467	0.31	0.01	—	3,477

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	74.8	74.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	15.0	15.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	26.6	24.5	1.26	149	0.01	0.27	—	0.27	0.20	—	0.20	—	614	614	0.03	0.01	—	616
Total	116	114	1.26	149	0.01	0.27	—	0.27	0.20	—	0.20	—	614	614	0.03	0.01	—	616
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Consum Products	74.8	74.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	15.0	15.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	89.9	89.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	13.7	13.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	2.75	2.75	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	3.59	3.31	0.17	20.2	< 0.005	0.04	—	0.04	0.03	—	0.03	—	75.2	75.2	< 0.005	< 0.005	—	75.5
Total	20.0	19.7	0.17	20.2	< 0.005	0.04	—	0.04	0.03	—	0.03	—	75.2	75.2	< 0.005	< 0.005	—	75.5

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	104	0.00	104	10.6	0.25	—	444

Unrefrig Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	39.3	0.00	39.3	4.03	0.10	—	168
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	13.9	0.00	13.9	1.43	0.03	—	59.8
Refrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	11.3	0.00	11.3	1.16	0.03	—	48.3
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	168	0.00	168	17.2	0.41	—	721
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	104	0.00	104	10.6	0.25	—	444
Unrefrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	39.3	0.00	39.3	4.03	0.10	—	168
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	13.9	0.00	13.9	1.43	0.03	—	59.8
Refrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	11.3	0.00	11.3	1.16	0.03	—	48.3
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	168	0.00	168	17.2	0.41	—	721

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	17.1	0.00	17.1	1.76	0.04	—	73.5
Unrefrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	6.50	0.00	6.50	0.67	0.02	—	27.9
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	2.31	0.00	2.31	0.24	0.01	—	9.90
Refrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	1.87	0.00	1.87	0.19	< 0.005	—	8.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	27.8	0.00	27.8	2.85	0.07	—	119

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	1,072	0.00	1,072	107	0.00	—	3,750

Unrefrig Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	407	0.00	407	40.6	0.00	—	1,422
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	144	0.00	144	14.4	0.00	—	505
Refrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	117	0.00	117	11.7	0.00	—	408
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1,739	0.00	1,739	174	0.00	—	6,085
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	1,072	0.00	1,072	107	0.00	—	3,750
Unrefrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	407	0.00	407	40.6	0.00	—	1,422
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	144	0.00	144	14.4	0.00	—	505
Refrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	117	0.00	117	11.7	0.00	—	408
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1,739	0.00	1,739	174	0.00	—	6,085

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	177	0.00	177	17.7	0.00	—	621
Unrefrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	67.3	0.00	67.3	6.73	0.00	—	235
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	23.9	0.00	23.9	2.39	0.00	—	83.6
Refrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	19.3	0.00	19.3	1.93	0.00	—	67.6
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	288	0.00	288	28.8	0.00	—	1,007

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	7,590	7,590

Refriger Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6,135	6,135
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13,725	13,725
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	7,590	7,590
Refrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6,135	6,135
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13,725	13,725
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,257	1,257
Refrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,016	1,016
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2,272	2,272

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Rough Terrain Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Rough Terrain Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Rough Terrain Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Emergency	3.61	3.28	9.17	8.37	0.02	0.48	0.00	0.48	0.48	0.00	0.48	0.00	1,679	1,679	0.07	0.01	0.00	1,685
Total	3.61	3.28	9.17	8.37	0.02	0.48	0.00	0.48	0.48	0.00	0.48	0.00	1,679	1,679	0.07	0.01	0.00	1,685
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	3.61	3.28	9.17	8.37	0.02	0.48	0.00	0.48	0.48	0.00	0.48	0.00	1,679	1,679	0.07	0.01	0.00	1,685
Total	3.61	3.28	9.17	8.37	0.02	0.48	0.00	0.48	0.48	0.00	0.48	0.00	1,679	1,679	0.07	0.01	0.00	1,685
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.09	0.08	0.23	0.21	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	38.1	38.1	< 0.005	< 0.005	0.00	38.2
Total	0.09	0.08	0.23	0.21	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	38.1	38.1	< 0.005	< 0.005	0.00	38.2

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Unrefrigerated Warehouse-No Rail	2,962	2,962	2,962	1,081,139	72,136	72,136	72,136	26,329,813
Unrefrigerated Warehouse-Rail	1,124	1,124	1,124	410,087	44,941	44,941	44,941	16,403,496
Refrigerated Warehouse-No Rail	399	399	399	145,526	9,710	9,710	9,710	3,544,110
Refrigerated Warehouse-Rail	322	322	322	117,631	12,891	12,891	12,891	4,705,259
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	5,149,857	1,716,619	1,029,971

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	270

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Unrefrigerated Warehouse-No Rail	23,726,707	0.00	0.0000	0.0000	40,381,494
Unrefrigerated Warehouse-Rail	8,999,781	0.00	0.0000	0.0000	15,317,110
Refrigerated Warehouse-No Rail	6,082,654	0.00	0.0000	0.0000	5,332,013
Refrigerated Warehouse-Rail	4,916,730	0.00	0.0000	0.0000	4,309,972
Parking Lot	15,037,582	0.00	0.0000	0.0000	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Unrefrigerated Warehouse-No Rail	54,038,559	2,750,970

Unrefrigerated Warehouse-Rail	20,497,384	1,043,471
Refrigerated Warehouse-No Rail	7,273,831	370,293
Refrigerated Warehouse-Rail	5,879,571	299,314
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Unrefrigerated Warehouse-No Rail	1,989	—
Unrefrigerated Warehouse-Rail	754	—
Refrigerated Warehouse-No Rail	268	—
Refrigerated Warehouse-Rail	216	—
Parking Lot	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Refrigerated Warehouse-No Rail	Cold storage	R-404A	3,922	7.50	7.50	7.50	25.0
Refrigerated Warehouse-Rail	Cold storage	R-404A	3,922	7.50	7.50	7.50	25.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Forklifts	Electric	Average	412	24.0	200	0.20

Rough Terrain Forklifts	Electric	Average	12.0	24.0	200	0.40

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
Emergency Generator	Diesel	4.00	1.00	50.0	500	0.73

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	32.8	annual days of extreme heat
Extreme Precipitation	0.00	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.19	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A

Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	11.6
AQ-PM	19.1
AQ-DPM	9.09
Drinking Water	30.6
Lead Risk Housing	50.8
Pesticides	90.5
Toxic Releases	7.58
Traffic	3.06
Effect Indicators	—
CleanUp Sites	74.2
Groundwater	77.9
Haz Waste Facilities/Generators	93.2
Impaired Water Bodies	100.0
Solid Waste	86.5
Sensitive Population	—
Asthma	87.6
Cardio-vascular	83.2
Low Birth Weights	26.9
Socioeconomic Factor Indicators	—
Education	82.7
Housing	51.4
Linguistic	88.8
Poverty	94.9
Unemployment	99.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	16.66880534
Employed	7.173104068
Median HI	5.299627871
Education	—
Bachelor's or higher	5.017323239
High school enrollment	16.8741178
Preschool enrollment	68.89516233
Transportation	—
Auto Access	18.40112922
Active commuting	51.10997049
Social	—
2-parent households	13.28114975
Voting	16.79712563
Neighborhood	—
Alcohol availability	70.25535737
Park access	33.85089183
Retail density	4.311561658
Supermarket access	49.58295907
Tree canopy	0.782753753
Housing	—
Homeownership	38.3036058
Housing habitability	30.96368536
Low-inc homeowner severe housing cost burden	26.76761196
Low-inc renter severe housing cost burden	52.89362248

Uncrowded housing	38.58591043
Health Outcomes	—
Insured adults	21.00603105
Arthritis	0.0
Asthma ER Admissions	30.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	41.7
Cognitively Disabled	50.3
Physically Disabled	19.5
Heart Attack ER Admissions	46.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	54.3
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0

Children	14.1
Elderly	42.0
English Speaking	18.7
Foreign-born	65.3
Outdoor Workers	5.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	85.8
Traffic Density	4.9
Traffic Access	23.0
Other Indices	—
Hardship	92.9
Other Decision Support	—
2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	82.0
Healthy Places Index Score for Project Location (b)	11.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Land use data are based on applicant-provided buildout assumptions.
Operations: Vehicle Data	Trip rates are based on ITE Land Use Code 154.
Operations: Landscape Equipment	Assumed 270 summer days for desert region.
Operations: Off-Road Equipment	Assumed forklifts and yard trucks (modeled as rough terrain forklifts) as part of project operations.
Operations: Road Dust	All roads used by future developments projects within the Specific Plan Area would be required to be paved. Per ICAPCD guidance a value of 85% paved is assumed in the modeling to account for the high levels of entrained dust generated from vehicle travel on paved roadways in the region.
Operations: Fleet Mix	Fleet mix adjusted for passenger vehicles (no-rail land uses) and trucks (rail land uses).
Operations: Emergency Generators and Fire Pumps	Assumed 4 back-up generators operating 1 hour/day and 50 hours/year for maintenance and testing.
Operations: Water and Waste Water	Water data are based on applicant-provided calculations for the land use.
Characteristics: Utility Information	GHG intensity factors adjusted per RPS requirements.

Lithium Valley Operation - Phase 2 - Workforce Training Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Lithium Valley Operation - Phase 2 - Workforce Training
Operational Year	2045
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	4.80
Location	33.18829759139308, -115.6026869228474
County	Imperial
City	Unincorporated
Air District	Imperial County APCD
Air Basin	Salton Sea
TAZ	5600
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
General Office Building	102	1000sqft	103	102,409	20,482	—	—	—
Parking Lot	205	1000sqft	4.70	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	6.97	6.56	4.51	55.5	0.16	0.11	2,538	2,538	0.11	255	255	75.0	16,687	16,762	7.87	0.68	4.79	17,167
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	5.76	5.43	5.00	32.9	0.14	0.11	2,538	2,538	0.10	255	255	75.0	14,735	14,810	7.87	0.71	0.37	15,218
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	5.68	5.38	3.77	33.0	0.11	0.09	1,896	1,896	0.09	190	191	75.0	11,854	11,929	7.80	0.54	1.73	12,288
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.04	0.98	0.69	6.03	0.02	0.02	346	346	0.02	34.8	34.8	12.4	1,963	1,975	1.29	0.09	0.29	2,034

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	3.52	3.19	4.18	50.8	0.16	0.08	2,538	2,538	0.08	255	255	—	16,317	16,317	0.28	0.62	4.54	16,514

Area	3.41	3.35	0.04	4.45	< 0.005	0.01	—	0.01	0.01	—	0.01	—	18.3	18.3	< 0.005	< 0.005	—	18.4
Energy	0.03	0.02	0.29	0.25	< 0.005	0.02	—	0.02	0.02	—	0.02	—	352	352	0.03	< 0.005	—	353
Water	—	—	—	—	—	—	—	—	—	—	—	23.7	0.00	23.7	2.43	0.06	—	101
Waste	—	—	—	—	—	—	—	—	—	—	—	51.3	0.00	51.3	5.13	0.00	—	180
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.25	0.25
Total	6.97	6.56	4.51	55.5	0.16	0.11	2,538	2,538	0.11	255	255	75.0	16,687	16,762	7.87	0.68	4.79	17,167
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	3.11	2.79	4.70	32.6	0.14	0.08	2,538	2,538	0.08	255	255	—	14,383	14,383	0.28	0.65	0.12	14,584
Area	2.62	2.62	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.03	0.02	0.29	0.25	< 0.005	0.02	—	0.02	0.02	—	0.02	—	352	352	0.03	< 0.005	—	353
Water	—	—	—	—	—	—	—	—	—	—	—	23.7	0.00	23.7	2.43	0.06	—	101
Waste	—	—	—	—	—	—	—	—	—	—	—	51.3	0.00	51.3	5.13	0.00	—	180
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.25	0.25
Total	5.76	5.43	5.00	32.9	0.14	0.11	2,538	2,538	0.10	255	255	75.0	14,735	14,810	7.87	0.71	0.37	15,218
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	2.44	2.20	3.45	29.5	0.11	0.06	1,896	1,896	0.06	190	190	—	11,489	11,489	0.21	0.48	1.48	11,640
Area	3.21	3.16	0.03	3.29	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	13.5	13.5	< 0.005	< 0.005	—	13.6
Energy	0.03	0.02	0.29	0.25	< 0.005	0.02	—	0.02	0.02	—	0.02	—	352	352	0.03	< 0.005	—	353
Water	—	—	—	—	—	—	—	—	—	—	—	23.7	0.00	23.7	2.43	0.06	—	101
Waste	—	—	—	—	—	—	—	—	—	—	—	51.3	0.00	51.3	5.13	0.00	—	180
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.25	0.25
Total	5.68	5.38	3.77	33.0	0.11	0.09	1,896	1,896	0.09	190	191	75.0	11,854	11,929	7.80	0.54	1.73	12,288
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.45	0.40	0.63	5.38	0.02	0.01	346	346	0.01	34.8	34.8	—	1,902	1,902	0.03	0.08	0.25	1,927
Area	0.59	0.58	0.01	0.60	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.24	2.24	< 0.005	< 0.005	—	2.25
Energy	0.01	< 0.005	0.05	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	58.2	58.2	0.01	< 0.005	—	58.4

Water	—	—	—	—	—	—	—	—	—	—	—	3.92	0.00	3.92	0.40	0.01	—	16.8
Waste	—	—	—	—	—	—	—	—	—	—	—	8.50	0.00	8.50	0.85	0.00	—	29.7
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.04	0.04
Total	1.04	0.98	0.69	6.03	0.02	0.02	346	346	0.02	34.8	34.8	12.4	1,963	1,975	1.29	0.09	0.29	2,034

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	3.52	3.19	4.18	50.8	0.16	0.08	2,538	2,538	0.08	255	255	—	16,317	16,317	0.28	0.62	4.54	16,514
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	3.52	3.19	4.18	50.8	0.16	0.08	2,538	2,538	0.08	255	255	—	16,317	16,317	0.28	0.62	4.54	16,514
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	3.11	2.79	4.70	32.6	0.14	0.08	2,538	2,538	0.08	255	255	—	14,383	14,383	0.28	0.65	0.12	14,584
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	3.11	2.79	4.70	32.6	0.14	0.08	2,538	2,538	0.08	255	255	—	14,383	14,383	0.28	0.65	0.12	14,584
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Office Building	0.45	0.40	0.63	5.38	0.02	0.01	346	346	0.01	34.8	34.8	—	1,902	1,902	0.03	0.08	0.25	1,927
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.45	0.40	0.63	5.38	0.02	0.01	346	346	0.01	34.8	34.8	—	1,902	1,902	0.03	0.08	0.25	1,927

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.03	0.02	0.29	0.25	< 0.005	0.02	—	0.02	0.02	—	0.02	—	352	352	0.03	< 0.005	—	353
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.03	0.02	0.29	0.25	< 0.005	0.02	—	0.02	0.02	—	0.02	—	352	352	0.03	< 0.005	—	353
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.03	0.02	0.29	0.25	< 0.005	0.02	—	0.02	0.02	—	0.02	—	352	352	0.03	< 0.005	—	353
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.03	0.02	0.29	0.25	< 0.005	0.02	—	0.02	0.02	—	0.02	—	352	352	0.03	< 0.005	—	353
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.01	< 0.005	0.05	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	58.2	58.2	0.01	< 0.005	—	58.4

Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.01	< 0.005	0.05	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	58.2	58.2	0.01	< 0.005	—	58.4

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	2.21	2.21	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.41	0.41	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.79	0.73	0.04	4.45	< 0.005	0.01	—	0.01	0.01	—	0.01	—	18.3	18.3	< 0.005	< 0.005	—	18.4
Total	3.41	3.35	0.04	4.45	< 0.005	0.01	—	0.01	0.01	—	0.01	—	18.3	18.3	< 0.005	< 0.005	—	18.4
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	2.21	2.21	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.41	0.41	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	2.62	2.62	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.40	0.40	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.08	0.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.11	0.10	0.01	0.60	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.24	2.24	< 0.005	< 0.005	—	2.25
Total	0.59	0.58	0.01	0.60	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.24	2.24	< 0.005	< 0.005	—	2.25

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	23.7	0.00	23.7	2.43	0.06	—	101
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	23.7	0.00	23.7	2.43	0.06	—	101
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Office Building	—	—	—	—	—	—	—	—	—	—	—	23.7	0.00	23.7	2.43	0.06	—	101
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	23.7	0.00	23.7	2.43	0.06	—	101
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	3.92	0.00	3.92	0.40	0.01	—	16.8
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	3.92	0.00	3.92	0.40	0.01	—	16.8

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	51.3	0.00	51.3	5.13	0.00	—	180
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	51.3	0.00	51.3	5.13	0.00	—	180
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Office Building	—	—	—	—	—	—	—	—	—	—	—	51.3	0.00	51.3	5.13	0.00	—	180
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	51.3	0.00	51.3	5.13	0.00	—	180
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	8.50	0.00	8.50	0.85	0.00	—	29.7
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	8.50	0.00	8.50	0.85	0.00	—	29.7

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.25	0.25
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.25	0.25
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.25	0.25
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.25	0.25

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.04	0.04
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.04	0.04

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
General Office Building	1,110	252	79.9	306,727	22,612	5,131	1,627	6,247,640
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	153,614	51,205	12,289

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	270

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
General Office Building	3,894,874	0.00	0.0000	0.0000	1,097,460
Parking Lot	179,422	0.00	0.0000	0.0000	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
General Office Building	12,343,079	284,312
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
General Office Building	95.2	—
Parking Lot	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced

General Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
General Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	32.8	annual days of extreme heat
Extreme Precipitation	0.00	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.19	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	11.6
AQ-PM	19.1
AQ-DPM	9.09
Drinking Water	30.6
Lead Risk Housing	50.8
Pesticides	90.5
Toxic Releases	7.58
Traffic	3.06
Effect Indicators	—
CleanUp Sites	74.2
Groundwater	77.9
Haz Waste Facilities/Generators	93.2
Impaired Water Bodies	100.0
Solid Waste	86.5
Sensitive Population	—
Asthma	87.6
Cardio-vascular	83.2
Low Birth Weights	26.9

Socioeconomic Factor Indicators	—
Education	82.7
Housing	51.4
Linguistic	88.8
Poverty	94.9
Unemployment	99.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	16.66880534
Employed	7.173104068
Median HI	5.299627871
Education	—
Bachelor's or higher	5.017323239
High school enrollment	16.8741178
Preschool enrollment	68.89516233
Transportation	—
Auto Access	18.40112922
Active commuting	51.10997049
Social	—
2-parent households	13.28114975
Voting	16.79712563
Neighborhood	—
Alcohol availability	70.25535737
Park access	33.85089183
Retail density	4.311561658

Supermarket access	49.58295907
Tree canopy	0.782753753
Housing	—
Homeownership	38.3036058
Housing habitability	30.96368536
Low-inc homeowner severe housing cost burden	26.76761196
Low-inc renter severe housing cost burden	52.89362248
Uncrowded housing	38.58591043
Health Outcomes	—
Insured adults	21.00603105
Arthritis	0.0
Asthma ER Admissions	30.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	41.7
Cognitively Disabled	50.3
Physically Disabled	19.5
Heart Attack ER Admissions	46.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	54.3
Physical Health Not Good	0.0
Stroke	0.0

Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	14.1
Elderly	42.0
English Speaking	18.7
Foreign-born	65.3
Outdoor Workers	5.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	85.8
Traffic Density	4.9
Traffic Access	23.0
Other Indices	—
Hardship	92.9
Other Decision Support	—
2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	82.0
Healthy Places Index Score for Project Location (b)	11.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Land use data are based on applicant-provided buildout assumptions.
Operations: Landscape Equipment	Assumed 270 summer days for desert region.
Operations: Vehicle Data	Trip rates are based on ITE Land Use Code 170
Operations: Road Dust	All roads used by future developments projects within the Specific Plan Area would be required to be paved. Per ICAPCD guidance a value of 85% paved is assumed in the modeling to account for the high levels of entrained dust generated from vehicle travel on paved roadways in the region.
Operations: Water and Waste Water	Water data are based on applicant-provided calculations for the land use.
Characteristics: Utility Information	GHG intensity factors adjusted per RPS requirements.

Lithium Valley Operations - Phase 2 - Geothermal Energy Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Lithium Valley Operations - Phase 2 - Geothermal Energy
Operational Year	2045
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	4.80
Location	33.191685370393785, -115.60759423347932
County	Imperial
City	Unincorporated
Air District	Imperial County APCD
Air Basin	Salton Sea
TAZ	5600
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
General Heavy Industry	10,447	1000sqft	7,599	10,447,002	2,089,400	—	—	—
Parking Lot	20,894	1000sqft	480	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	505	484	510	1,389	2.66	17.1	34,014	34,031	16.8	3,415	3,432	15,328	272,821	288,149	1,559	29.0	2,780	338,556
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	419	404	513	691	2.38	16.3	34,014	34,030	16.2	3,415	3,432	15,328	245,037	260,365	1,559	29.3	2,721	310,804
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	370	361	106	727	1.46	3.44	23,198	23,201	3.25	2,330	2,333	15,328	148,886	164,214	1,556	26.2	2,738	213,681
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	67.6	65.9	19.3	133	0.27	0.63	4,234	4,234	0.59	425	426	2,538	24,650	27,187	258	4.34	453	35,377

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	43.1	38.8	54.2	672	2.14	1.11	34,014	34,015	1.05	3,415	3,416	—	218,273	218,273	3.59	8.24	60.8	220,878

Area	348	342	3.82	454	0.03	0.81	—	0.81	0.61	—	0.61	—	1,868	1,868	0.08	0.02	—	1,875
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	8,347	0.00	8,347	856	20.3	—	35,802
Waste	—	—	—	—	—	—	—	—	—	—	—	6,982	0.00	6,982	698	0.00	—	24,426
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2,719	2,719
Stationary	113	103	452	263	0.49	15.1	0.00	15.1	15.1	0.00	15.1	0.00	52,680	52,680	2.12	0.41	0.00	52,855
Total	505	484	510	1,389	2.66	17.1	34,014	34,031	16.8	3,415	3,432	15,328	272,821	288,149	1,559	29.0	2,780	338,556
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	38.2	34.1	61.1	428	1.89	1.11	34,014	34,015	1.05	3,415	3,416	—	192,357	192,357	3.60	8.56	1.58	195,001
Area	267	267	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	8,347	0.00	8,347	856	20.3	—	35,802
Waste	—	—	—	—	—	—	—	—	—	—	—	6,982	0.00	6,982	698	0.00	—	24,426
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2,719	2,719
Stationary	113	103	452	263	0.49	15.1	0.00	15.1	15.1	0.00	15.1	0.00	52,680	52,680	2.12	0.41	0.00	52,855
Total	419	404	513	691	2.38	16.3	34,014	34,030	16.2	3,415	3,432	15,328	245,037	260,365	1,559	29.3	2,721	310,804
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	27.4	24.5	40.9	355	1.38	0.77	23,198	23,198	0.73	2,330	2,330	—	140,287	140,287	2.47	5.83	18.1	142,105
Area	327	323	2.83	336	0.02	0.60	—	0.60	0.45	—	0.45	—	1,382	1,382	0.06	0.01	—	1,387
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	8,347	0.00	8,347	856	20.3	—	35,802
Waste	—	—	—	—	—	—	—	—	—	—	—	6,982	0.00	6,982	698	0.00	—	24,426
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2,719	2,719
Stationary	15.5	14.1	62.0	36.0	0.07	2.08	0.00	2.08	2.08	0.00	2.08	0.00	7,216	7,216	0.29	0.06	0.00	7,240
Total	370	361	106	727	1.46	3.44	23,198	23,201	3.25	2,330	2,333	15,328	148,886	164,214	1,556	26.2	2,738	213,681

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	5.00	4.47	7.46	64.9	0.25	0.14	4,234	4,234	0.13	425	425	—	23,226	23,226	0.41	0.97	3.00	23,527
Area	59.7	58.9	0.52	61.3	< 0.005	0.11	—	0.11	0.08	—	0.08	—	229	229	0.01	< 0.005	—	230
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	1,382	0.00	1,382	142	3.37	—	5,927
Waste	—	—	—	—	—	—	—	—	—	—	—	1,156	0.00	1,156	116	0.00	—	4,044
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	450	450
Stationary	2.83	2.57	11.3	6.56	0.01	0.38	0.00	0.38	0.38	0.00	0.38	0.00	1,195	1,195	0.05	0.01	0.00	1,199
Total	67.6	65.9	19.3	133	0.27	0.63	4,234	4,234	0.59	425	426	2,538	24,650	27,187	258	4.34	453	35,377

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	43.1	38.8	54.2	672	2.14	1.11	34,014	34,015	1.05	3,415	3,416	—	218,273	218,273	3.59	8.24	60.8	220,878
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	43.1	38.8	54.2	672	2.14	1.11	34,014	34,015	1.05	3,415	3,416	—	218,273	218,273	3.59	8.24	60.8	220,878
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	38.2	34.1	61.1	428	1.89	1.11	34,014	34,015	1.05	3,415	3,416	—	192,357	192,357	3.60	8.56	1.58	195,001
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	38.2	34.1	61.1	428	1.89	1.11	34,014	34,015	1.05	3,415	3,416	—	192,357	192,357	3.60	8.56	1.58	195,001
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	5.00	4.47	7.46	64.9	0.25	0.14	4,234	4,234	0.13	425	425	—	23,226	23,226	0.41	0.97	3.00	23,527
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	5.00	4.47	7.46	64.9	0.25	0.14	4,234	4,234	0.13	425	425	—	23,226	23,226	0.41	0.97	3.00	23,527

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	225	225	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	42.2	42.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	80.9	74.7	3.82	454	0.03	0.81	—	0.81	0.61	—	0.61	—	1,868	1,868	0.08	0.02	—	1,875
Total	348	342	3.82	454	0.03	0.81	—	0.81	0.61	—	0.61	—	1,868	1,868	0.08	0.02	—	1,875
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Consum Products	225	225	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	42.2	42.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	267	267	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	41.1	41.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	7.70	7.70	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	10.9	10.1	0.52	61.3	< 0.005	0.11	—	0.11	0.08	—	0.08	—	229	229	0.01	< 0.005	—	230
Total	59.7	58.9	0.52	61.3	< 0.005	0.11	—	0.11	0.08	—	0.08	—	229	229	0.01	< 0.005	—	230

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	8,347	0.00	8,347	856	20.3	—	35,802

Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	8,347	0.00	8,347	856	20.3	—	35,802
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	8,347	0.00	8,347	856	20.3	—	35,802
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	8,347	0.00	8,347	856	20.3	—	35,802
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	1,382	0.00	1,382	142	3.37	—	5,927
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1,382	0.00	1,382	142	3.37	—	5,927

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	6,982	0.00	6,982	698	0.00	—	24,426
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Total	—	—	—	—	—	—	—	—	—	—	—	6,982	0.00	6,982	698	0.00	—	24,426
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	6,982	0.00	6,982	698	0.00	—	24,426
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	6,982	0.00	6,982	698	0.00	—	24,426
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	1,156	0.00	1,156	116	0.00	—	4,044
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1,156	0.00	1,156	116	0.00	—	4,044

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2,719	2,719
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2,719	2,719
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2,719	2,719
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2,719	2,719
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	450	450
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	450	450

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipm Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	108	98.0	438	250	0.47	14.4	0.00	14.4	14.4	0.00	14.4	0.00	50,161	50,161	2.01	0.39	0.00	50,328
Fire Pump	5.41	4.92	13.8	12.6	0.02	0.72	0.00	0.72	0.72	0.00	0.72	0.00	2,519	2,519	0.10	0.02	0.00	2,527
Total	113	103	452	263	0.49	15.1	0.00	15.1	15.1	0.00	15.1	0.00	52,680	52,680	2.12	0.41	0.00	52,855
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	108	98.0	438	250	0.47	14.4	0.00	14.4	14.4	0.00	14.4	0.00	50,161	50,161	2.01	0.39	0.00	50,328
Fire Pump	5.41	4.92	13.8	12.6	0.02	0.72	0.00	0.72	0.72	0.00	0.72	0.00	2,519	2,519	0.10	0.02	0.00	2,527
Total	113	103	452	263	0.49	15.1	0.00	15.1	15.1	0.00	15.1	0.00	52,680	52,680	2.12	0.41	0.00	52,855
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	2.69	2.45	11.0	6.25	0.01	0.36	0.00	0.36	0.36	0.00	0.36	0.00	1,138	1,138	0.05	0.01	0.00	1,141
Fire Pump	0.14	0.12	0.34	0.31	< 0.005	0.02	0.00	0.02	0.02	0.00	0.02	0.00	57.1	57.1	< 0.005	< 0.005	0.00	57.3
Total	2.83	2.57	11.3	6.56	0.01	0.38	0.00	0.38	0.38	0.00	0.38	0.00	1,195	1,195	0.05	0.01	0.00	1,199

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipm Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
General Heavy Industry	7,835	12,850	10,134	3,241,182	184,762	303,010	238,959	76,429,946
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	15,670,503	5,223,501	1,253,640

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	270

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
General Heavy Industry	416,779,880	0.00	0.0000	0.0000	0.00
Parking Lot	18,303,144	0.00	0.0000	0.0000	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
General Heavy Industry	4,355,683,704	77,111,659
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
General Heavy Industry	12,954	—
Parking Lot	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
General Heavy Industry	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
Emergency Generator	Diesel	10.0	1.00	50.0	4,300	0.73
Emergency Generator	Diesel	5.00	1.00	50.0	3,350	0.73
Fire Pump	Diesel	6.00	1.00	50.0	500	0.73

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit

Temperature and Extreme Heat	32.8	annual days of extreme heat
Extreme Precipitation	0.00	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.19	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	11.6
AQ-PM	19.1
AQ-DPM	9.09
Drinking Water	30.6
Lead Risk Housing	50.8
Pesticides	90.5
Toxic Releases	7.58

Traffic	3.06
Effect Indicators	—
CleanUp Sites	74.2
Groundwater	77.9
Haz Waste Facilities/Generators	93.2
Impaired Water Bodies	100.0
Solid Waste	86.5
Sensitive Population	—
Asthma	87.6
Cardio-vascular	83.2
Low Birth Weights	26.9
Socioeconomic Factor Indicators	—
Education	82.7
Housing	51.4
Linguistic	88.8
Poverty	94.9
Unemployment	99.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	16.66880534
Employed	7.173104068
Median HI	5.299627871
Education	—
Bachelor's or higher	5.017323239
High school enrollment	16.8741178

Preschool enrollment	68.89516233
Transportation	—
Auto Access	18.40112922
Active commuting	51.10997049
Social	—
2-parent households	13.28114975
Voting	16.79712563
Neighborhood	—
Alcohol availability	70.25535737
Park access	33.85089183
Retail density	4.311561658
Supermarket access	49.58295907
Tree canopy	0.782753753
Housing	—
Homeownership	38.3036058
Housing habitability	30.96368536
Low-inc homeowner severe housing cost burden	26.76761196
Low-inc renter severe housing cost burden	52.89362248
Uncrowded housing	38.58591043
Health Outcomes	—
Insured adults	21.00603105
Arthritis	0.0
Asthma ER Admissions	30.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0

Diagnosed Diabetes	0.0
Life Expectancy at Birth	41.7
Cognitively Disabled	50.3
Physically Disabled	19.5
Heart Attack ER Admissions	46.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	54.3
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	14.1
Elderly	42.0
English Speaking	18.7
Foreign-born	65.3
Outdoor Workers	5.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	85.8
Traffic Density	4.9
Traffic Access	23.0
Other Indices	—

Hardship	92.9
Other Decision Support	—
2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	82.0
Healthy Places Index Score for Project Location (b)	11.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Land use data are based on applicant-provided buildout assumptions.
Operations: Landscape Equipment	Assumed 270 summer days for desert region.
Operations: Energy Use	Natural gas not anticipated as part of project operations.

Operations: Emergency Generators and Fire Pumps	Assumed 10 4,300 hp backup generators operating 1 hour/day and 50 hours/year each for maintenance and testing. Assumed 5 3,350 hp backup generators operating 1 hour/day and 50 hours/year each for maintenance and testing. Also assumed 6 fire pumps operating 1 hour/day and 50 hours/year each for maintenance and testing.
Operations: Road Dust	All roads used by future developments projects within the Specific Plan Area would be required to be paved. Per ICAPCD guidance a value of 85% paved is assumed in the modeling to account for the high levels of entrained dust generated from vehicle travel on paved roadways in the region.
Operations: Vehicle Data	Custom trip rates are provided by the applicant.
Operations: Water and Waste Water	Water data are based on applicant-provided calculations for the land use.
Characteristics: Utility Information	GHG intensity factor per RPS requirements.

Lithium Valley Operation - Phase 3 - Parks Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Lithium Valley Operation - Phase 3 - Parks
Operational Year	2050
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	4.80
Location	33.18829759139308, -115.6026869228474
County	Imperial
City	Unincorporated
Air District	Imperial County APCD
Air Basin	Salton Sea
TAZ	5600
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
City Park	103	Acre	103	0.00	4,031,433	4,031,433	—	—
Parking Lot	448	1000sqft	10.3	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.16	3.09	0.81	10.0	0.03	0.02	515	515	0.02	51.7	51.7	4.77	3,268	3,273	0.53	0.12	0.43	3,324
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.08	3.02	0.91	6.43	0.03	0.02	515	515	0.02	51.7	51.7	4.77	2,880	2,884	0.53	0.13	0.01	2,936
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.81	2.77	0.46	4.04	0.02	0.01	267	267	0.01	26.8	26.8	4.77	1,596	1,601	0.50	0.07	0.10	1,633
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.51	0.51	0.08	0.74	< 0.005	< 0.005	48.7	48.7	< 0.005	4.89	4.89	0.79	264	265	0.08	0.01	0.02	270

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.68	0.61	0.81	10.0	0.03	0.02	515	515	0.02	51.7	51.7	—	3,268	3,268	0.05	0.12	0.43	3,307

Area	2.48	2.48	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	4.77	0.00	4.77	0.48	0.00	—	16.7
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	3.16	3.09	0.81	10.0	0.03	0.02	515	515	0.02	51.7	51.7	4.77	3,268	3,273	0.53	0.12	0.43	3,324
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.60	0.54	0.91	6.43	0.03	0.02	515	515	0.02	51.7	51.7	—	2,880	2,880	0.05	0.13	0.01	2,919
Area	2.48	2.48	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	4.77	0.00	4.77	0.48	0.00	—	16.7
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	3.08	3.02	0.91	6.43	0.03	0.02	515	515	0.02	51.7	51.7	4.77	2,880	2,884	0.53	0.13	0.01	2,936
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.33	0.29	0.46	4.04	0.02	0.01	267	267	0.01	26.8	26.8	—	1,596	1,596	0.03	0.07	0.10	1,617
Area	2.48	2.48	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	4.77	0.00	4.77	0.48	0.00	—	16.7
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	2.81	2.77	0.46	4.04	0.02	0.01	267	267	0.01	26.8	26.8	4.77	1,596	1,601	0.50	0.07	0.10	1,633
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.06	0.05	0.08	0.74	< 0.005	< 0.005	48.7	48.7	< 0.005	4.89	4.89	—	264	264	< 0.005	0.01	0.02	268
Area	0.45	0.45	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.79	0.00	0.79	0.08	0.00	—	2.76
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	0.51	0.51	0.08	0.74	< 0.005	< 0.005	48.7	48.7	< 0.005	4.89	4.89	0.79	264	265	0.08	0.01	0.02	270

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	0.68	0.61	0.81	10.0	0.03	0.02	515	515	0.02	51.7	51.7	—	3,268	3,268	0.05	0.12	0.43	3,307
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.68	0.61	0.81	10.0	0.03	0.02	515	515	0.02	51.7	51.7	—	3,268	3,268	0.05	0.12	0.43	3,307
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	0.60	0.54	0.91	6.43	0.03	0.02	515	515	0.02	51.7	51.7	—	2,880	2,880	0.05	0.13	0.01	2,919
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.60	0.54	0.91	6.43	0.03	0.02	515	515	0.02	51.7	51.7	—	2,880	2,880	0.05	0.13	0.01	2,919
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	0.06	0.05	0.08	0.74	< 0.005	< 0.005	48.7	48.7	< 0.005	4.89	4.89	—	264	264	< 0.005	0.01	0.02	268

Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.06	0.05	0.08	0.74	< 0.005	< 0.005	48.7	48.7	< 0.005	4.89	4.89	—	264	264	< 0.005	0.01	0.02	268

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	2.41	2.41	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.07	0.07	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	2.48	2.48	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	2.41	2.41	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.07	0.07	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	2.48	2.48	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.44	0.44	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.01	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Landscape	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.45	0.45	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	4.77	0.00	4.77	0.48	0.00	—	16.7
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	4.77	0.00	4.77	0.48	0.00	—	16.7
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	4.77	0.00	4.77	0.48	0.00	—	16.7
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	4.77	0.00	4.77	0.48	0.00	—	16.7
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	0.79	0.00	0.79	0.08	0.00	—	2.76
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.79	0.00	0.79	0.08	0.00	—	2.76

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Remove	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
City Park	80.2	202	225	43,163	1,634	4,105	4,587	879,174
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	6,000	2,000	26,876

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	270

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
City Park	0.00	0.00	0.0000	0.0000	0.00
Parking Lot	392,395	0.00	0.0000	0.0000	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
City Park	0.00	12,627,390
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)

City Park	8.84	—
Parking Lot	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
City Park	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
City Park	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	32.8	annual days of extreme heat
Extreme Precipitation	0.00	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.19	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A

Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	11.6
AQ-PM	19.1
AQ-DPM	9.09
Drinking Water	30.6
Lead Risk Housing	50.8
Pesticides	90.5
Toxic Releases	7.58
Traffic	3.06
Effect Indicators	—
CleanUp Sites	74.2
Groundwater	77.9

Haz Waste Facilities/Generators	93.2
Impaired Water Bodies	100.0
Solid Waste	86.5
Sensitive Population	—
Asthma	87.6
Cardio-vascular	83.2
Low Birth Weights	26.9
Socioeconomic Factor Indicators	—
Education	82.7
Housing	51.4
Linguistic	88.8
Poverty	94.9
Unemployment	99.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	16.66880534
Employed	7.173104068
Median HI	5.299627871
Education	—
Bachelor's or higher	5.017323239
High school enrollment	16.8741178
Preschool enrollment	68.89516233
Transportation	—
Auto Access	18.40112922
Active commuting	51.10997049

Social	—
2-parent households	13.28114975
Voting	16.79712563
Neighborhood	—
Alcohol availability	70.25535737
Park access	33.85089183
Retail density	4.311561658
Supermarket access	49.58295907
Tree canopy	0.782753753
Housing	—
Homeownership	38.3036058
Housing habitability	30.96368536
Low-inc homeowner severe housing cost burden	26.76761196
Low-inc renter severe housing cost burden	52.89362248
Uncrowded housing	38.58591043
Health Outcomes	—
Insured adults	21.00603105
Arthritis	0.0
Asthma ER Admissions	30.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	41.7
Cognitively Disabled	50.3
Physically Disabled	19.5

Heart Attack ER Admissions	46.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	54.3
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	14.1
Elderly	42.0
English Speaking	18.7
Foreign-born	65.3
Outdoor Workers	5.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	85.8
Traffic Density	4.9
Traffic Access	23.0
Other Indices	—
Hardship	92.9
Other Decision Support	—
2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	82.0
Healthy Places Index Score for Project Location (b)	11.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Land use data are based on applicant-provided buildout assumptions.
Operations: Vehicle Data	Based on SANDAG trip rate for regional, developed park. Defaults for trip length were not changed.
Operations: Road Dust	All roads used by future developments projects within the Specific Plan Area would be required to be paved. Per ICAPCD guidance a value of 85% paved is assumed in the modeling to account for the high levels of entrained dust generated from vehicle travel on paved roadways in the region.
Operations: Landscape Equipment	Assumed 270 summer days for desert region.
Operations: Water and Waste Water	Water data are based on applicant-provided calculations for the land use.
Characteristics: Utility Information	GHG intensity factors adjusted per RPS requirements.

Lithium Valley Operation - Phase 3 - Anaerobic Digester Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Lithium Valley Operation - Phase 3 - Anaerobic Digester
Operational Year	2050
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	4.80
Location	33.18829759139308, -115.6026869228474
County	Imperial
City	Unincorporated
Air District	Imperial County APCD
Air Basin	Salton Sea
TAZ	5600
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
General Heavy Industry	100	1000sqft	758	100,000	20,000	—	—	—
Parking Lot	200	1000sqft	4.59	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	9.38	8.71	8.94	93.8	0.30	0.24	4,591	4,591	0.23	461	461	1,092	30,760	31,851	112	3.72	29.9	35,798
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	7.94	7.35	9.88	57.6	0.26	0.23	4,591	4,591	0.22	461	461	1,092	27,304	28,395	112	3.76	26.1	32,351
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	7.03	6.55	6.95	51.1	0.19	0.18	3,141	3,142	0.18	315	316	1,092	20,241	21,333	112	3.36	27.2	25,167
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.28	1.20	1.27	9.33	0.04	0.03	573	573	0.03	57.6	57.6	181	3,351	3,532	18.6	0.56	4.50	4,167

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	5.95	5.39	8.04	88.7	0.29	0.16	4,591	4,591	0.15	461	461	—	29,701	29,701	0.48	1.22	3.92	30,081

Area	3.33	3.27	0.04	4.35	< 0.005	0.01	—	0.01	0.01	—	0.01	—	17.9	17.9	< 0.005	< 0.005	—	17.9
Energy	0.10	0.05	0.87	0.73	0.01	0.07	—	0.07	0.07	—	0.07	—	1,041	1,041	0.09	< 0.005	—	1,044
Water	—	—	—	—	—	—	—	—	—	—	—	1,025	0.00	1,025	105	2.50	—	4,396
Waste	—	—	—	—	—	—	—	—	—	—	—	66.8	0.00	66.8	6.68	0.00	—	234
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	26.0	26.0
Total	9.38	8.71	8.94	93.8	0.30	0.24	4,591	4,591	0.23	461	461	1,092	30,760	31,851	112	3.72	29.9	35,798
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	5.29	4.74	9.01	56.8	0.26	0.16	4,591	4,591	0.15	461	461	—	26,263	26,263	0.48	1.26	0.10	26,651
Area	2.56	2.56	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.10	0.05	0.87	0.73	0.01	0.07	—	0.07	0.07	—	0.07	—	1,041	1,041	0.09	< 0.005	—	1,044
Water	—	—	—	—	—	—	—	—	—	—	—	1,025	0.00	1,025	105	2.50	—	4,396
Waste	—	—	—	—	—	—	—	—	—	—	—	66.8	0.00	66.8	6.68	0.00	—	234
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	26.0	26.0
Total	7.94	7.35	9.88	57.6	0.26	0.23	4,591	4,591	0.22	461	461	1,092	27,304	28,395	112	3.76	26.1	32,351
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	3.80	3.42	6.05	47.2	0.19	0.11	3,141	3,142	0.11	315	316	—	19,187	19,187	0.33	0.86	1.17	19,454
Area	3.13	3.09	0.03	3.22	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	13.2	13.2	< 0.005	< 0.005	—	13.3
Energy	0.10	0.05	0.87	0.73	0.01	0.07	—	0.07	0.07	—	0.07	—	1,041	1,041	0.09	< 0.005	—	1,044
Water	—	—	—	—	—	—	—	—	—	—	—	1,025	0.00	1,025	105	2.50	—	4,396
Waste	—	—	—	—	—	—	—	—	—	—	—	66.8	0.00	66.8	6.68	0.00	—	234
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	26.0	26.0
Total	7.03	6.55	6.95	51.1	0.19	0.18	3,141	3,142	0.18	315	316	1,092	20,241	21,333	112	3.36	27.2	25,167
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.69	0.62	1.10	8.61	0.03	0.02	573	573	0.02	57.6	57.6	—	3,177	3,177	0.05	0.14	0.19	3,221
Area	0.57	0.56	< 0.005	0.59	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.19	2.19	< 0.005	< 0.005	—	2.20
Energy	0.02	0.01	0.16	0.13	< 0.005	0.01	—	0.01	0.01	—	0.01	—	172	172	0.02	< 0.005	—	173

Water	—	—	—	—	—	—	—	—	—	—	—	170	0.00	170	17.4	0.41	—	728
Waste	—	—	—	—	—	—	—	—	—	—	—	11.1	0.00	11.1	1.11	0.00	—	38.7
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4.31	4.31
Total	1.28	1.20	1.27	9.33	0.04	0.03	573	573	0.03	57.6	57.6	181	3,351	3,532	18.6	0.56	4.50	4,167

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	5.95	5.39	8.04	88.7	0.29	0.16	4,591	4,591	0.15	461	461	—	29,701	29,701	0.48	1.22	3.92	30,081
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	5.95	5.39	8.04	88.7	0.29	0.16	4,591	4,591	0.15	461	461	—	29,701	29,701	0.48	1.22	3.92	30,081
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	5.29	4.74	9.01	56.8	0.26	0.16	4,591	4,591	0.15	461	461	—	26,263	26,263	0.48	1.26	0.10	26,651
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	5.29	4.74	9.01	56.8	0.26	0.16	4,591	4,591	0.15	461	461	—	26,263	26,263	0.48	1.26	0.10	26,651
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	0.69	0.62	1.10	8.61	0.03	0.02	573	573	0.02	57.6	57.6	—	3,177	3,177	0.05	0.14	0.19	3,221
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.69	0.62	1.10	8.61	0.03	0.02	573	573	0.02	57.6	57.6	—	3,177	3,177	0.05	0.14	0.19	3,221

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.10	0.05	0.87	0.73	0.01	0.07	—	0.07	0.07	—	0.07	—	1,041	1,041	0.09	< 0.005	—	1,044
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.10	0.05	0.87	0.73	0.01	0.07	—	0.07	0.07	—	0.07	—	1,041	1,041	0.09	< 0.005	—	1,044
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.10	0.05	0.87	0.73	0.01	0.07	—	0.07	0.07	—	0.07	—	1,041	1,041	0.09	< 0.005	—	1,044
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.10	0.05	0.87	0.73	0.01	0.07	—	0.07	0.07	—	0.07	—	1,041	1,041	0.09	< 0.005	—	1,044
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.02	0.01	0.16	0.13	< 0.005	0.01	—	0.01	0.01	—	0.01	—	172	172	0.02	< 0.005	—	173

Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.02	0.01	0.16	0.13	< 0.005	0.01	—	0.01	0.01	—	0.01	—	172	172	0.02	< 0.005	—	173

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	2.16	2.16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.40	0.40	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.77	0.71	0.04	4.35	< 0.005	0.01	—	0.01	0.01	—	0.01	—	17.9	17.9	< 0.005	< 0.005	—	17.9
Total	3.33	3.27	0.04	4.35	< 0.005	0.01	—	0.01	0.01	—	0.01	—	17.9	17.9	< 0.005	< 0.005	—	17.9
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	2.16	2.16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.40	0.40	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	2.56	2.56	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.39	0.39	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.07	0.07	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.10	0.10	< 0.005	0.59	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.19	2.19	< 0.005	< 0.005	—	2.20
Total	0.57	0.56	< 0.005	0.59	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.19	2.19	< 0.005	< 0.005	—	2.20

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	1,025	0.00	1,025	105	2.50	—	4,396
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1,025	0.00	1,025	105	2.50	—	4,396
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	1,025	0.00	1,025	105	2.50	—	4,396
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1,025	0.00	1,025	105	2.50	—	4,396
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	170	0.00	170	17.4	0.41	—	728
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	170	0.00	170	17.4	0.41	—	728

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	66.8	0.00	66.8	6.68	0.00	—	234
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	66.8	0.00	66.8	6.68	0.00	—	234
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	66.8	0.00	66.8	6.68	0.00	—	234
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	66.8	0.00	66.8	6.68	0.00	—	234
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	11.1	0.00	11.1	1.11	0.00	—	38.7
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	11.1	0.00	11.1	1.11	0.00	—	38.7

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	26.0	26.0
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	26.0	26.0
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	26.0	26.0
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	26.0	26.0

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4.31	4.31
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4.31	4.31

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
General Heavy Industry	1,229	2,008	1,592	508,132	25,033	40,900	32,427	10,350,016
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	150,000	50,000	12,000

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	270

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
General Heavy Industry	3,037,443	0.00	0.0000	0.0000	3,248,460
Parking Lot	175,200	0.00	0.0000	0.0000	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
General Heavy Industry	534,808,081	9,468,076
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
General Heavy Industry	124	—
Parking Lot	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
General Heavy Industry	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	32.8	annual days of extreme heat
Extreme Precipitation	0.00	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.19	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A

Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	11.6
AQ-PM	19.1
AQ-DPM	9.09
Drinking Water	30.6
Lead Risk Housing	50.8
Pesticides	90.5
Toxic Releases	7.58
Traffic	3.06
Effect Indicators	—
CleanUp Sites	74.2
Groundwater	77.9
Haz Waste Facilities/Generators	93.2
Impaired Water Bodies	100.0
Solid Waste	86.5
Sensitive Population	—
Asthma	87.6
Cardio-vascular	83.2
Low Birth Weights	26.9
Socioeconomic Factor Indicators	—
Education	82.7
Housing	51.4
Linguistic	88.8
Poverty	94.9
Unemployment	99.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	16.66880534
Employed	7.173104068
Median HI	5.299627871
Education	—
Bachelor's or higher	5.017323239
High school enrollment	16.8741178
Preschool enrollment	68.89516233
Transportation	—
Auto Access	18.40112922
Active commuting	51.10997049
Social	—
2-parent households	13.28114975
Voting	16.79712563
Neighborhood	—
Alcohol availability	70.25535737
Park access	33.85089183
Retail density	4.311561658
Supermarket access	49.58295907
Tree canopy	0.782753753
Housing	—
Homeownership	38.3036058
Housing habitability	30.96368536
Low-inc homeowner severe housing cost burden	26.76761196
Low-inc renter severe housing cost burden	52.89362248

Uncrowded housing	38.58591043
Health Outcomes	—
Insured adults	21.00603105
Arthritis	0.0
Asthma ER Admissions	30.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	41.7
Cognitively Disabled	50.3
Physically Disabled	19.5
Heart Attack ER Admissions	46.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	54.3
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0

Children	14.1
Elderly	42.0
English Speaking	18.7
Foreign-born	65.3
Outdoor Workers	5.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	85.8
Traffic Density	4.9
Traffic Access	23.0
Other Indices	—
Hardship	92.9
Other Decision Support	—
2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	82.0
Healthy Places Index Score for Project Location (b)	11.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Land use data are based on applicant-provided buildout assumptions.
Operations: Vehicle Data	Trip rates are based on ITE Land Use Code 170.
Operations: Landscape Equipment	Assumed 270 summer days for desert region.
Operations: Road Dust	All roads used by future developments projects within the Specific Plan Area would be required to be paved. Per ICAPCD guidance a value of 85% paved is assumed in the modeling to account for the high levels of entrained dust generated from vehicle travel on paved roadways in the region.
Operations: Water and Waste Water	Water data are based on applicant-provided calculations for the land use.
Operations: Off-Road Equipment	Assumed a tractor/loader/backhoe as part of project operations.
Characteristics: Utility Information	GHG intensity factors adjusted per RPS requirements.

Lithium Valley Operation - Phase 3 - Automobile Manufacturing Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Lithium Valley Operation - Phase 3 - Automobile Manufacturing
Operational Year	2050
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	4.80
Location	33.18829759139308, -115.6026869228474
County	Imperial
City	Unincorporated
Air District	Imperial County APCD
Air Basin	Salton Sea
TAZ	5600
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Manufacturing	587	1000sqft	465	586,688	293,344	—	—	—
Parking Lot	2,933	1000sqft	67.3	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	34.9	32.9	25.8	233	0.70	0.92	10,410	10,411	0.89	1,045	1,046	551	73,973	74,524	57.2	3.17	162	77,061
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	28.8	27.2	27.8	135	0.62	0.88	10,410	10,411	0.86	1,045	1,046	551	66,072	66,624	57.2	3.27	153	69,180
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	28.0	26.6	19.3	130	0.46	0.69	7,122	7,123	0.67	715	716	551	49,745	50,296	56.8	2.36	155	52,576
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	5.11	4.85	3.53	23.8	0.08	0.13	1,300	1,300	0.12	131	131	91.3	8,236	8,327	9.41	0.39	25.7	8,705

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	13.5	12.2	18.2	201	0.66	0.37	10,410	10,410	0.35	1,045	1,046	—	67,340	67,340	1.08	2.77	8.89	68,202

Area	19.9	19.6	0.21	25.5	< 0.005	0.05	—	0.05	0.03	—	0.03	—	105	105	< 0.005	< 0.005	—	105
Energy	0.56	0.28	5.12	4.30	0.03	0.39	—	0.39	0.39	—	0.39	—	6,108	6,108	0.54	0.01	—	6,125
Water	—	—	—	—	—	—	—	—	—	—	—	159	0.00	159	16.3	0.39	—	684
Waste	—	—	—	—	—	—	—	—	—	—	—	392	0.00	392	39.2	0.00	—	1,372
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	153	153
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	0.90	0.82	2.29	2.09	< 0.005	0.12	0.00	0.12	0.12	0.00	0.12	0.00	420	420	0.02	< 0.005	0.00	421
Total	34.9	32.9	25.8	233	0.70	0.92	10,410	10,411	0.89	1,045	1,046	551	73,973	74,524	57.2	3.17	162	77,061
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	12.0	10.7	20.4	129	0.58	0.37	10,410	10,410	0.35	1,045	1,046	—	59,545	59,545	1.09	2.87	0.23	60,426
Area	15.4	15.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.56	0.28	5.12	4.30	0.03	0.39	—	0.39	0.39	—	0.39	—	6,108	6,108	0.54	0.01	—	6,125
Water	—	—	—	—	—	—	—	—	—	—	—	159	0.00	159	16.3	0.39	—	684
Waste	—	—	—	—	—	—	—	—	—	—	—	392	0.00	392	39.2	0.00	—	1,372
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	153	153
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	0.90	0.82	2.29	2.09	< 0.005	0.12	0.00	0.12	0.12	0.00	0.12	0.00	420	420	0.02	< 0.005	0.00	421
Total	28.8	27.2	27.8	135	0.62	0.88	10,410	10,411	0.86	1,045	1,046	551	66,072	66,624	57.2	3.27	153	69,180
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	8.62	7.75	13.7	107	0.43	0.25	7,122	7,123	0.24	715	716	—	43,502	43,502	0.75	1.96	2.66	44,108
Area	18.7	18.5	0.16	18.9	< 0.005	0.03	—	0.03	0.03	—	0.03	—	77.6	77.6	< 0.005	< 0.005	—	77.9
Energy	0.56	0.28	5.12	4.30	0.03	0.39	—	0.39	0.39	—	0.39	—	6,108	6,108	0.54	0.01	—	6,125
Water	—	—	—	—	—	—	—	—	—	—	—	159	0.00	159	16.3	0.39	—	684
Waste	—	—	—	—	—	—	—	—	—	—	—	392	0.00	392	39.2	0.00	—	1,372

Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	153	153
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	0.12	0.11	0.31	0.29	< 0.005	0.02	0.00	0.02	0.02	0.00	0.02	0.00	57.5	57.5	< 0.005	< 0.005	0.00	57.7
Total	28.0	26.6	19.3	130	0.46	0.69	7,122	7,123	0.67	715	716	551	49,745	50,296	56.8	2.36	155	52,576
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.57	1.41	2.50	19.5	0.08	0.05	1,300	1,300	0.04	131	131	—	7,202	7,202	0.12	0.32	0.44	7,303
Area	3.42	3.37	0.03	3.44	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	12.9	12.9	< 0.005	< 0.005	—	12.9
Energy	0.10	0.05	0.93	0.78	0.01	0.07	—	0.07	0.07	—	0.07	—	1,011	1,011	0.09	< 0.005	—	1,014
Water	—	—	—	—	—	—	—	—	—	—	—	26.4	0.00	26.4	2.71	0.06	—	113
Waste	—	—	—	—	—	—	—	—	—	—	—	64.9	0.00	64.9	6.49	0.00	—	227
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	25.3	25.3
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	0.02	0.02	0.06	0.05	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	9.52	9.52	< 0.005	< 0.005	0.00	9.55
Total	5.11	4.85	3.53	23.8	0.08	0.13	1,300	1,300	0.12	131	131	91.3	8,236	8,327	9.41	0.39	25.7	8,705

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Manufacturing	13.5	12.2	18.2	201	0.66	0.37	10,410	10,410	0.35	1,045	1,046	—	67,340	67,340	1.08	2.77	8.89	68,202
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	13.5	12.2	18.2	201	0.66	0.37	10,410	10,410	0.35	1,045	1,046	—	67,340	67,340	1.08	2.77	8.89	68,202
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	12.0	10.7	20.4	129	0.58	0.37	10,410	10,410	0.35	1,045	1,046	—	59,545	59,545	1.09	2.87	0.23	60,426
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	12.0	10.7	20.4	129	0.58	0.37	10,410	10,410	0.35	1,045	1,046	—	59,545	59,545	1.09	2.87	0.23	60,426
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	1.57	1.41	2.50	19.5	0.08	0.05	1,300	1,300	0.04	131	131	—	7,202	7,202	0.12	0.32	0.44	7,303
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	1.57	1.41	2.50	19.5	0.08	0.05	1,300	1,300	0.04	131	131	—	7,202	7,202	0.12	0.32	0.44	7,303

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

undefine	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
undefined	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
undefined	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	0.56	0.28	5.12	4.30	0.03	0.39	—	0.39	0.39	—	0.39	—	6,108	6,108	0.54	0.01	—	6,125
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.56	0.28	5.12	4.30	0.03	0.39	—	0.39	0.39	—	0.39	—	6,108	6,108	0.54	0.01	—	6,125

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	0.56	0.28	5.12	4.30	0.03	0.39	—	0.39	0.39	—	0.39	—	6,108	6,108	0.54	0.01	—	6,125
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.56	0.28	5.12	4.30	0.03	0.39	—	0.39	0.39	—	0.39	—	6,108	6,108	0.54	0.01	—	6,125
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	0.10	0.05	0.93	0.78	0.01	0.07	—	0.07	0.07	—	0.07	—	1,011	1,011	0.09	< 0.005	—	1,014
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.10	0.05	0.93	0.78	0.01	0.07	—	0.07	0.07	—	0.07	—	1,011	1,011	0.09	< 0.005	—	1,014

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	12.8	12.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	2.57	2.57	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	4.54	4.19	0.21	25.5	< 0.005	0.05	—	0.05	0.03	—	0.03	—	105	105	< 0.005	< 0.005	—	105

Total	19.9	19.6	0.21	25.5	< 0.005	0.05	—	0.05	0.03	—	0.03	—	105	105	< 0.005	< 0.005	—	105
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	12.8	12.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	2.57	2.57	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	15.4	15.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	2.33	2.33	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.47	0.47	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.61	0.57	0.03	3.44	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	12.9	12.9	< 0.005	< 0.005	—	12.9
Total	3.42	3.37	0.03	3.44	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	12.9	12.9	< 0.005	< 0.005	—	12.9

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	159	0.00	159	16.3	0.39	—	684
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	159	0.00	159	16.3	0.39	—	684
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	159	0.00	159	16.3	0.39	—	684
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	159	0.00	159	16.3	0.39	—	684
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	26.4	0.00	26.4	2.71	0.06	—	113
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	26.4	0.00	26.4	2.71	0.06	—	113

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	392	0.00	392	39.2	0.00	—	1,372

Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	392	0.00	392	39.2	0.00	—	1,372
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	392	0.00	392	39.2	0.00	—	1,372
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	392	0.00	392	39.2	0.00	—	1,372
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	64.9	0.00	64.9	6.49	0.00	—	227
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	64.9	0.00	64.9	6.49	0.00	—	227

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	153	153
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	153	153
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Manufac	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	153	153
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	153	153
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	25.3	25.3
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	25.3	25.3

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.90	0.82	2.29	2.09	< 0.005	0.12	0.00	0.12	0.12	0.00	0.12	0.00	420	420	0.02	< 0.005	0.00	421
Total	0.90	0.82	2.29	2.09	< 0.005	0.12	0.00	0.12	0.12	0.00	0.12	0.00	420	420	0.02	< 0.005	0.00	421
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.90	0.82	2.29	2.09	< 0.005	0.12	0.00	0.12	0.12	0.00	0.12	0.00	420	420	0.02	< 0.005	0.00	421
Total	0.90	0.82	2.29	2.09	< 0.005	0.12	0.00	0.12	0.12	0.00	0.12	0.00	420	420	0.02	< 0.005	0.00	421
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.02	0.02	0.06	0.05	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	9.52	9.52	< 0.005	< 0.005	0.00	9.55
Total	0.02	0.02	0.06	0.05	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	9.52	9.52	< 0.005	< 0.005	0.00	9.55

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Manufacturing	2,787	4,553	3,608	1,152,079	56,763	92,733	73,493	23,466,406
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	880,032	293,344	176,000

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	270

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Manufacturing	17,820,311	0.00	0.0000	0.0000	19,058,327
Parking Lot	2,569,597	0.00	0.0000	0.0000	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Manufacturing	83,188,654	3,681,865
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Manufacturing	727	—
Parking Lot	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Manufacturing	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Forklifts	Electric	Average	70.0	8.00	200	0.20

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
Emergency Generator	Diesel	1.00	1.00	50.0	500	0.73

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	32.8	annual days of extreme heat
Extreme Precipitation	0.00	annual days with precipitation above 20 mm

Sea Level Rise	—	meters of inundation depth
Wildfire	0.19	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A

Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	11.6
AQ-PM	19.1
AQ-DPM	9.09
Drinking Water	30.6
Lead Risk Housing	50.8
Pesticides	90.5
Toxic Releases	7.58
Traffic	3.06
Effect Indicators	—

CleanUp Sites	74.2
Groundwater	77.9
Haz Waste Facilities/Generators	93.2
Impaired Water Bodies	100.0
Solid Waste	86.5
Sensitive Population	—
Asthma	87.6
Cardio-vascular	83.2
Low Birth Weights	26.9
Socioeconomic Factor Indicators	—
Education	82.7
Housing	51.4
Linguistic	88.8
Poverty	94.9
Unemployment	99.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	16.66880534
Employed	7.173104068
Median HI	5.299627871
Education	—
Bachelor's or higher	5.017323239
High school enrollment	16.8741178
Preschool enrollment	68.89516233
Transportation	—

Auto Access	18.40112922
Active commuting	51.10997049
Social	—
2-parent households	13.28114975
Voting	16.79712563
Neighborhood	—
Alcohol availability	70.25535737
Park access	33.85089183
Retail density	4.311561658
Supermarket access	49.58295907
Tree canopy	0.782753753
Housing	—
Homeownership	38.3036058
Housing habitability	30.96368536
Low-inc homeowner severe housing cost burden	26.76761196
Low-inc renter severe housing cost burden	52.89362248
Uncrowded housing	38.58591043
Health Outcomes	—
Insured adults	21.00603105
Arthritis	0.0
Asthma ER Admissions	30.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	41.7

Cognitively Disabled	50.3
Physically Disabled	19.5
Heart Attack ER Admissions	46.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	54.3
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	14.1
Elderly	42.0
English Speaking	18.7
Foreign-born	65.3
Outdoor Workers	5.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	85.8
Traffic Density	4.9
Traffic Access	23.0
Other Indices	—
Hardship	92.9
Other Decision Support	—

2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	82.0
Healthy Places Index Score for Project Location (b)	11.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Land use data are based on applicant-provided buildout assumptions.
Operations: Landscape Equipment	Assumed 270 summer days for desert region.
Operations: Vehicle Data	Trip rates are based on ITE Land Use Code 140.
Operations: Road Dust	All roads used by future developments projects within the Specific Plan Area would be required to be paved. Per ICAPCD guidance a value of 85% paved is assumed in the modeling to account for the high levels of entrained dust generated from vehicle travel on paved roadways in the region.

Operations: Off-Road Equipment	Assumed offroad equipment as part of project operations. Number of equipment based on SCAQMD Study (0.12 per KSF).
Operations: Water and Waste Water	Water data are based on applicant-provided calculations for the land use.
Characteristics: Utility Information	GHG intensity factors adjusted per RPS requirements.

Lithium Valley Operation - Phase 3 - Battery Manufacturing Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Lithium Valley Operation - Phase 3 - Battery Manufacturing
Operational Year	2050
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	4.80
Location	33.18829759139308, -115.6026869228474
County	Imperial
City	Unincorporated
Air District	Imperial County APCD
Air Basin	Salton Sea
TAZ	5600
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Manufacturing	4,007	1000sqft	3,445	4,006,517	2,003,258	—	—	—
Parking Lot	20,033	1000sqft	460	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	236	222	170	1,585	4.74	5.96	71,088	71,094	5.75	7,138	7,144	5,808	503,974	509,783	600	26.6	1,104	533,823
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	194	183	184	917	4.21	5.65	71,088	71,094	5.52	7,138	7,144	5,808	450,023	455,831	600	27.3	1,044	480,005
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	191	181	131	890	3.13	4.69	48,640	48,644	4.54	4,885	4,889	5,808	339,548	345,357	597	21.1	1,061	367,644
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	34.9	33.1	23.9	162	0.57	0.86	8,877	8,878	0.83	891	892	962	56,216	57,178	98.9	3.49	176	60,868

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	92.2	83.4	124	1,373	4.51	2.51	71,088	71,091	2.38	7,138	7,141	—	459,868	459,868	7.41	18.9	60.7	465,752

Area	136	134	1.47	174	0.01	0.31	—	0.31	0.23	—	0.23	—	717	717	0.03	0.01	—	719
Energy	3.85	1.92	35.0	29.4	0.21	2.66	—	2.66	2.66	—	2.66	—	41,711	41,711	3.69	0.08	—	41,827
Water	—	—	—	—	—	—	—	—	—	—	—	3,131	0.00	3,131	321	7.63	—	13,430
Waste	—	—	—	—	—	—	—	—	—	—	—	2,677	0.00	2,677	268	0.00	—	9,368
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,043	1,043
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	3.61	3.28	9.17	8.37	0.02	0.48	0.00	0.48	0.48	0.00	0.48	0.00	1,679	1,679	0.07	0.01	0.00	1,685
Total	236	222	170	1,585	4.74	5.96	71,088	71,094	5.75	7,138	7,144	5,808	503,974	509,783	600	26.6	1,104	533,823
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	81.8	73.4	140	880	3.98	2.51	71,088	71,091	2.38	7,138	7,141	—	406,633	406,633	7.46	19.6	1.57	412,653
Area	105	105	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	3.85	1.92	35.0	29.4	0.21	2.66	—	2.66	2.66	—	2.66	—	41,711	41,711	3.69	0.08	—	41,827
Water	—	—	—	—	—	—	—	—	—	—	—	3,131	0.00	3,131	321	7.63	—	13,430
Waste	—	—	—	—	—	—	—	—	—	—	—	2,677	0.00	2,677	268	0.00	—	9,368
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,043	1,043
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	3.61	3.28	9.17	8.37	0.02	0.48	0.00	0.48	0.48	0.00	0.48	0.00	1,679	1,679	0.07	0.01	0.00	1,685
Total	194	183	184	917	4.21	5.65	71,088	71,094	5.52	7,138	7,144	5,808	450,023	455,831	600	27.3	1,044	480,005
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	58.9	52.9	93.7	730	2.91	1.74	48,640	48,642	1.65	4,885	4,886	—	297,077	297,077	5.11	13.4	18.2	301,214
Area	128	126	1.08	129	0.01	0.23	—	0.23	0.17	—	0.17	—	530	530	0.02	< 0.005	—	532
Energy	3.85	1.92	35.0	29.4	0.21	2.66	—	2.66	2.66	—	2.66	—	41,711	41,711	3.69	0.08	—	41,827
Water	—	—	—	—	—	—	—	—	—	—	—	3,131	0.00	3,131	321	7.63	—	13,430
Waste	—	—	—	—	—	—	—	—	—	—	—	2,677	0.00	2,677	268	0.00	—	9,368

Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,043	1,043
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	0.49	0.45	1.26	1.15	< 0.005	0.07	0.00	0.07	0.07	0.00	0.07	0.00	230	230	0.01	< 0.005	0.00	231
Total	191	181	131	890	3.13	4.69	48,640	48,644	4.54	4,885	4,889	5,808	339,548	345,357	597	21.1	1,061	367,644
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	10.7	9.65	17.1	133	0.53	0.32	8,877	8,877	0.30	891	892	—	49,184	49,184	0.85	2.22	3.01	49,869
Area	23.3	23.0	0.20	23.5	< 0.005	0.04	—	0.04	0.03	—	0.03	—	87.8	87.8	< 0.005	< 0.005	—	88.1
Energy	0.70	0.35	6.38	5.36	0.04	0.48	—	0.48	0.48	—	0.48	—	6,906	6,906	0.61	0.01	—	6,925
Water	—	—	—	—	—	—	—	—	—	—	—	518	0.00	518	53.2	1.26	—	2,223
Waste	—	—	—	—	—	—	—	—	—	—	—	443	0.00	443	44.3	0.00	—	1,551
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	173	173
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	0.09	0.08	0.23	0.21	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	38.1	38.1	< 0.005	< 0.005	0.00	38.2
Total	34.9	33.1	23.9	162	0.57	0.86	8,877	8,878	0.83	891	892	962	56,216	57,178	98.9	3.49	176	60,868

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Manufacturing	92.2	83.4	124	1,373	4.51	2.51	71,088	71,091	2.38	7,138	7,141	—	459,868	459,868	7.41	18.9	60.7	465,752
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	92.2	83.4	124	1,373	4.51	2.51	71,088	71,091	2.38	7,138	7,141	—	459,868	459,868	7.41	18.9	60.7	465,752
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	81.8	73.4	140	880	3.98	2.51	71,088	71,091	2.38	7,138	7,141	—	406,633	406,633	7.46	19.6	1.57	412,653
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	81.8	73.4	140	880	3.98	2.51	71,088	71,091	2.38	7,138	7,141	—	406,633	406,633	7.46	19.6	1.57	412,653
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	10.7	9.65	17.1	133	0.53	0.32	8,877	8,877	0.30	891	892	—	49,184	49,184	0.85	2.22	3.01	49,869
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	10.7	9.65	17.1	133	0.53	0.32	8,877	8,877	0.30	891	892	—	49,184	49,184	0.85	2.22	3.01	49,869

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

undefine	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
undefined	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
undefined	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	3.85	1.92	35.0	29.4	0.21	2.66	—	2.66	2.66	—	2.66	—	41,711	41,711	3.69	0.08	—	41,827
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	3.85	1.92	35.0	29.4	0.21	2.66	—	2.66	2.66	—	2.66	—	41,711	41,711	3.69	0.08	—	41,827

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	3.85	1.92	35.0	29.4	0.21	2.66	—	2.66	2.66	—	2.66	—	41,711	41,711	3.69	0.08	—	41,827
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	3.85	1.92	35.0	29.4	0.21	2.66	—	2.66	2.66	—	2.66	—	41,711	41,711	3.69	0.08	—	41,827
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	0.70	0.35	6.38	5.36	0.04	0.48	—	0.48	0.48	—	0.48	—	6,906	6,906	0.61	0.01	—	6,925
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.70	0.35	6.38	5.36	0.04	0.48	—	0.48	0.48	—	0.48	—	6,906	6,906	0.61	0.01	—	6,925

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	87.3	87.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	17.6	17.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	31.0	28.6	1.47	174	0.01	0.31	—	0.31	0.23	—	0.23	—	717	717	0.03	0.01	—	719

Total	136	134	1.47	174	0.01	0.31	—	0.31	0.23	—	0.23	—	717	717	0.03	0.01	—	719
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	87.3	87.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	17.6	17.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	105	105	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	15.9	15.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	3.20	3.20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	4.19	3.87	0.20	23.5	< 0.005	0.04	—	0.04	0.03	—	0.03	—	87.8	87.8	< 0.005	< 0.005	—	88.1
Total	23.3	23.0	0.20	23.5	< 0.005	0.04	—	0.04	0.03	—	0.03	—	87.8	87.8	< 0.005	< 0.005	—	88.1

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	3,131	0.00	3,131	321	7.63	—	13,430
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	3,131	0.00	3,131	321	7.63	—	13,430
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	3,131	0.00	3,131	321	7.63	—	13,430
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	3,131	0.00	3,131	321	7.63	—	13,430
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	518	0.00	518	53.2	1.26	—	2,223
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	518	0.00	518	53.2	1.26	—	2,223

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	2,677	0.00	2,677	268	0.00	—	9,368

Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	2,677	0.00	2,677	268	0.00	—	9,368
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	2,677	0.00	2,677	268	0.00	—	9,368
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	2,677	0.00	2,677	268	0.00	—	9,368
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	443	0.00	443	44.3	0.00	—	1,551
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	443	0.00	443	44.3	0.00	—	1,551

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,043	1,043
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,043	1,043
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Manufac	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,043	1,043
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,043	1,043
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	173	173
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	173	173

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	3.61	3.28	9.17	8.37	0.02	0.48	0.00	0.48	0.48	0.00	0.48	0.00	1,679	1,679	0.07	0.01	0.00	1,685
Total	3.61	3.28	9.17	8.37	0.02	0.48	0.00	0.48	0.48	0.00	0.48	0.00	1,679	1,679	0.07	0.01	0.00	1,685
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	3.61	3.28	9.17	8.37	0.02	0.48	0.00	0.48	0.48	0.00	0.48	0.00	1,679	1,679	0.07	0.01	0.00	1,685
Total	3.61	3.28	9.17	8.37	0.02	0.48	0.00	0.48	0.48	0.00	0.48	0.00	1,679	1,679	0.07	0.01	0.00	1,685
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.09	0.08	0.23	0.21	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	38.1	38.1	< 0.005	< 0.005	0.00	38.2
Total	0.09	0.08	0.23	0.21	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	38.1	38.1	< 0.005	< 0.005	0.00	38.2

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Manufacturing	19,031	31,091	24,640	7,867,596	387,637	633,276	501,888	160,253,097
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	6,009,776	2,003,259	1,201,955

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	270

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Manufacturing	121,695,654	0.00	0.0000	0.0000	130,150,114
Parking Lot	17,548,540	0.00	0.0000	0.0000	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Manufacturing	1,633,869,303	72,313,783
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Manufacturing	4,968	—
Parking Lot	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Manufacturing	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Forklifts	Electric	Average	481	8.00	82.0	0.20

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
Emergency Generator	Diesel	4.00	1.00	50.0	500	0.73

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	32.8	annual days of extreme heat
Extreme Precipitation	0.00	annual days with precipitation above 20 mm

Sea Level Rise	—	meters of inundation depth
Wildfire	0.19	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A

Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	11.6
AQ-PM	19.1
AQ-DPM	9.09
Drinking Water	30.6
Lead Risk Housing	50.8
Pesticides	90.5
Toxic Releases	7.58
Traffic	3.06
Effect Indicators	—

CleanUp Sites	74.2
Groundwater	77.9
Haz Waste Facilities/Generators	93.2
Impaired Water Bodies	100.0
Solid Waste	86.5
Sensitive Population	—
Asthma	87.6
Cardio-vascular	83.2
Low Birth Weights	26.9
Socioeconomic Factor Indicators	—
Education	82.7
Housing	51.4
Linguistic	88.8
Poverty	94.9
Unemployment	99.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	16.66880534
Employed	7.173104068
Median HI	5.299627871
Education	—
Bachelor's or higher	5.017323239
High school enrollment	16.8741178
Preschool enrollment	68.89516233
Transportation	—

Auto Access	18.40112922
Active commuting	51.10997049
Social	—
2-parent households	13.28114975
Voting	16.79712563
Neighborhood	—
Alcohol availability	70.25535737
Park access	33.85089183
Retail density	4.311561658
Supermarket access	49.58295907
Tree canopy	0.782753753
Housing	—
Homeownership	38.3036058
Housing habitability	30.96368536
Low-inc homeowner severe housing cost burden	26.76761196
Low-inc renter severe housing cost burden	52.89362248
Uncrowded housing	38.58591043
Health Outcomes	—
Insured adults	21.00603105
Arthritis	0.0
Asthma ER Admissions	30.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	41.7

Cognitively Disabled	50.3
Physically Disabled	19.5
Heart Attack ER Admissions	46.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	54.3
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	14.1
Elderly	42.0
English Speaking	18.7
Foreign-born	65.3
Outdoor Workers	5.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	85.8
Traffic Density	4.9
Traffic Access	23.0
Other Indices	—
Hardship	92.9
Other Decision Support	—

2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	82.0
Healthy Places Index Score for Project Location (b)	11.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Land use data are based on applicant-provided buildout assumptions.
Operations: Vehicle Data	Trip rates are based on ITE Land Use Code 140.
Operations: Landscape Equipment	Assumed 270 summer days for desert region.
Operations: Emergency Generators and Fire Pumps	Assumed 4 back-up generators operating 1 hour/day and 50 hours/year for maintenance and testing.

Operations: Road Dust	All roads used by future developments projects within the Specific Plan Area would be required to be paved. Per ICAPCD guidance a value of 85% paved is assumed in the modeling to account for the high levels of entrained dust generated from vehicle travel on paved roadways in the region.
Operations: Water and Waste Water	Water data are based on applicant-provided calculations for the land use.
Operations: Off-Road Equipment	Electric forklifts assumed as part of project operations.
Characteristics: Utility Information	GHG intensity factors adjusted per RPS requirements.

Lithium Valley Operation - Phase 3 - BESS Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Lithium Valley Operation - Phase 3 - BESS
Operational Year	2050
Lead Agency	—
Land Use Scale	Plan/community
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	4.80
Location	33.18829759139308, -115.6026869228474
County	Imperial
City	Unincorporated
Air District	Imperial County APCD
Air Basin	Salton Sea
TAZ	5600
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
General Heavy Industry	1,710	1000sqft	1,490	1,709,914	341,983	—	—	—
Parking Lot	3,420	1000sqft	78.5	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	57.9	56.8	2.93	76.6	0.01	0.25	5.39	5.64	0.22	0.54	0.76	1,143	760	1,903	114	0.01	646	5,407
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	44.7	44.6	2.30	2.16	< 0.005	0.12	5.39	5.51	0.12	0.54	0.66	1,143	451	1,593	114	< 0.005	646	5,097
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	53.7	52.9	0.78	55.4	< 0.005	0.11	3.80	3.91	0.09	0.38	0.47	1,143	307	1,450	114	< 0.005	646	4,952
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	9.80	9.66	0.14	10.1	< 0.005	0.02	0.69	0.71	0.02	0.07	0.09	189	50.8	240	18.9	< 0.005	107	820

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.01	0.01	0.01	0.10	< 0.005	< 0.005	5.39	5.39	< 0.005	0.54	0.54	—	34.8	34.8	< 0.005	< 0.005	< 0.005	35.2

Area	57.0	56.0	0.63	74.4	< 0.005	0.13	—	0.13	0.10	—	0.10	—	306	306	0.01	< 0.005	—	307
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	1,143	0.00	1,143	114	0.00	—	3,998
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	646	646
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	0.90	0.82	2.29	2.09	< 0.005	0.12	0.00	0.12	0.12	0.00	0.12	0.00	420	420	0.02	< 0.005	0.00	421
Total	57.9	56.8	2.93	76.6	0.01	0.25	5.39	5.64	0.22	0.54	0.76	1,143	760	1,903	114	0.01	646	5,407
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.01	0.01	0.01	0.07	< 0.005	< 0.005	5.39	5.39	< 0.005	0.54	0.54	—	30.7	30.7	< 0.005	< 0.005	< 0.005	31.2
Area	43.8	43.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	1,143	0.00	1,143	114	0.00	—	3,998
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	646	646
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	0.90	0.82	2.29	2.09	< 0.005	0.12	0.00	0.12	0.12	0.00	0.12	0.00	420	420	0.02	< 0.005	0.00	421
Total	44.7	44.6	2.30	2.16	< 0.005	0.12	5.39	5.51	0.12	0.54	0.66	1,143	451	1,593	114	< 0.005	646	5,097
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	< 0.005	< 0.005	0.01	0.06	< 0.005	< 0.005	3.80	3.80	< 0.005	0.38	0.38	—	23.1	23.1	< 0.005	< 0.005	< 0.005	23.5
Area	53.6	52.8	0.46	55.0	< 0.005	0.10	—	0.10	0.07	—	0.07	—	226	226	0.01	< 0.005	—	227
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	1,143	0.00	1,143	114	0.00	—	3,998

Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	646	646
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	0.12	0.11	0.31	0.29	< 0.005	0.02	0.00	0.02	0.02	0.00	0.02	0.00	57.5	57.5	< 0.005	< 0.005	0.00	57.7
Total	53.7	52.9	0.78	55.4	< 0.005	0.11	3.80	3.91	0.09	0.38	0.47	1,143	307	1,450	114	< 0.005	646	4,952
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	0.69	0.69	< 0.005	0.07	0.07	—	3.83	3.83	< 0.005	< 0.005	< 0.005	3.89
Area	9.78	9.64	0.08	10.0	< 0.005	0.02	—	0.02	0.01	—	0.01	—	37.5	37.5	< 0.005	< 0.005	—	37.6
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	189	0.00	189	18.9	0.00	—	662
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	107	107
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	0.02	0.02	0.06	0.05	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	9.52	9.52	< 0.005	< 0.005	0.00	9.55
Total	9.80	9.66	0.14	10.1	< 0.005	0.02	0.69	0.71	0.02	0.07	0.09	189	50.8	240	18.9	< 0.005	107	820

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Mobile source emissions results are presented in Sections 2.6. No further detailed breakdown of emissions is available.

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
undefined	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
undefined	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
undefined	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	36.9	36.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	6.91	6.91	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	13.2	12.2	0.63	74.4	< 0.005	0.13	—	0.13	0.10	—	0.10	—	306	306	0.01	< 0.005	—	307
Total	57.0	56.0	0.63	74.4	< 0.005	0.13	—	0.13	0.10	—	0.10	—	306	306	0.01	< 0.005	—	307
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	36.9	36.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	6.91	6.91	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	43.8	43.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	6.73	6.73	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architectural Coating	1.26	1.26	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	1.79	1.65	0.08	10.0	< 0.005	0.02	—	0.02	0.01	—	0.01	—	37.5	37.5	< 0.005	< 0.005	—	37.6
Total	9.78	9.64	0.08	10.0	< 0.005	0.02	—	0.02	0.01	—	0.01	—	37.5	37.5	< 0.005	< 0.005	—	37.6

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	1,143	0.00	1,143	114	0.00	—	3,998
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1,143	0.00	1,143	114	0.00	—	3,998
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	1,143	0.00	1,143	114	0.00	—	3,998
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1,143	0.00	1,143	114	0.00	—	3,998
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	189	0.00	189	18.9	0.00	—	662
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	189	0.00	189	18.9	0.00	—	662

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	646	646
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	646	646
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	646	646
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	646	646
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	107	107
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	107	107

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cranes	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cranes	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cranes	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Emergency	0.90	0.82	2.29	2.09	< 0.005	0.12	0.00	0.12	0.12	0.00	0.12	0.00	420	420	0.02	< 0.005	0.00	421
Total	0.90	0.82	2.29	2.09	< 0.005	0.12	0.00	0.12	0.12	0.00	0.12	0.00	420	420	0.02	< 0.005	0.00	421
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.90	0.82	2.29	2.09	< 0.005	0.12	0.00	0.12	0.12	0.00	0.12	0.00	420	420	0.02	< 0.005	0.00	421
Total	0.90	0.82	2.29	2.09	< 0.005	0.12	0.00	0.12	0.12	0.00	0.12	0.00	420	420	0.02	< 0.005	0.00	421
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.02	0.02	0.06	0.05	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	9.52	9.52	< 0.005	< 0.005	0.00	9.55
Total	0.02	0.02	0.06	0.05	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	9.52	9.52	< 0.005	< 0.005	0.00	9.55

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Total all Land Uses	2.00	0.00	0.00	521	48.0	0.00	0.00	12,514

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	2,564,872	854,957	205,190

5.10.3. Landscape Equipment

Season	Unit	Value

Snow Days	day/yr	0.00
Summer Days	day/yr	270

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
General Heavy Industry	18,980,000	0.00	0.0000	0.0000	0.00
Parking Lot	2,995,771	0.00	0.0000	0.0000	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
General Heavy Industry	0.00	813,457,745
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
General Heavy Industry	2,120	—
Parking Lot	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
General Heavy Industry	User Defined	User Defined	23,900	0.24	0.50	0.50	30.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Cranes	Electric	Average	1.00	8.00	367	0.29

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
Emergency Generator	Diesel	1.00	1.00	50.0	500	0.73

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	32.8	annual days of extreme heat
Extreme Precipitation	0.00	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.19	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	11.6
AQ-PM	19.1
AQ-DPM	9.09
Drinking Water	30.6
Lead Risk Housing	50.8
Pesticides	90.5
Toxic Releases	7.58
Traffic	3.06
Effect Indicators	—
CleanUp Sites	74.2
Groundwater	77.9
Haz Waste Facilities/Generators	93.2
Impaired Water Bodies	100.0
Solid Waste	86.5
Sensitive Population	—
Asthma	87.6
Cardio-vascular	83.2
Low Birth Weights	26.9

Socioeconomic Factor Indicators	—
Education	82.7
Housing	51.4
Linguistic	88.8
Poverty	94.9
Unemployment	99.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	16.66880534
Employed	7.173104068
Median HI	5.299627871
Education	—
Bachelor's or higher	5.017323239
High school enrollment	16.8741178
Preschool enrollment	68.89516233
Transportation	—
Auto Access	18.40112922
Active commuting	51.10997049
Social	—
2-parent households	13.28114975
Voting	16.79712563
Neighborhood	—
Alcohol availability	70.25535737
Park access	33.85089183
Retail density	4.311561658

Supermarket access	49.58295907
Tree canopy	0.782753753
Housing	—
Homeownership	38.3036058
Housing habitability	30.96368536
Low-inc homeowner severe housing cost burden	26.76761196
Low-inc renter severe housing cost burden	52.89362248
Uncrowded housing	38.58591043
Health Outcomes	—
Insured adults	21.00603105
Arthritis	0.0
Asthma ER Admissions	30.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	41.7
Cognitively Disabled	50.3
Physically Disabled	19.5
Heart Attack ER Admissions	46.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	54.3
Physical Health Not Good	0.0
Stroke	0.0

Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	14.1
Elderly	42.0
English Speaking	18.7
Foreign-born	65.3
Outdoor Workers	5.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	85.8
Traffic Density	4.9
Traffic Access	23.0
Other Indices	—
Hardship	92.9
Other Decision Support	—
2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	82.0
Healthy Places Index Score for Project Location (b)	11.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Land use data are based on applicant-provided buildout assumptions.
Operations: Energy Use	No natural gas. Energy demand kWh/year based on auxiliary energy consumption (2%) calculated based on an assumed 650 MW capacity, operating 4 hours/day and 365 days/year.
Operations: Water and Waste Water	Water data are based on applicant-provided calculations for the land use. No indoor water required for operations.
Operations: Off-Road Equipment	Project operations anticipated to require periodic maintenance that requires cranes to move battery units around every 3 years.
Operations: Refrigerants	Assumed 1,000 pounds of SF6 as part of project operations for breakers/inverters.
Operations: Landscape Equipment	Assumed 270 summer days for desert region.
Operations: Emergency Generators and Fire Pumps	Assumed 1 back-up generator operating 1 hour/day and 50 hours/year as part of project operations.
Operations: Road Dust	All roads used by future developments projects within the Specific Plan Area would be required to be paved. Per ICAPCD guidance a value of 85% paved is assumed in the modeling to account for the high levels of entrained dust generated from vehicle travel on paved roadways in the region.
Characteristics: Utility Information	GHG intensity factors adjusted per RPS requirements.

Lithium Valley Operation - Phase 3 - Business Industrial Parks Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Lithium Valley Operation - Phase 3 - Business Industrial Parks
Operational Year	2050
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	4.80
Location	33.18829759139308, -115.6026869228474
County	Imperial
City	Unincorporated
Air District	Imperial County APCD
Air Basin	Salton Sea
TAZ	5600
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Industrial Park	1,441	1000sqft	849	1,440,545	720,273	—	—	—
Parking Lot	7,203	1000sqft	165	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	65.5	62.9	28.7	285	0.74	1.06	11,100	11,101	1.01	1,115	1,116	1,148	77,851	78,998	117	3.42	384	83,324
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	52.7	51.0	30.5	145	0.65	0.95	11,100	11,101	0.93	1,115	1,116	1,148	69,281	70,428	117	3.52	375	74,774
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	58.3	56.2	23.6	194	0.60	0.77	9,580	9,581	0.73	962	963	1,148	63,765	64,913	117	3.10	379	69,132
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	10.6	10.3	4.31	35.4	0.11	0.14	1,748	1,749	0.13	176	176	190	10,557	10,747	19.3	0.51	62.7	11,446

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	14.4	13.0	19.4	214	0.70	0.39	11,100	11,100	0.37	1,115	1,115	—	71,806	71,806	1.16	2.95	9.48	72,725

Area	48.9	48.0	0.53	62.7	< 0.005	0.11	—	0.11	0.08	—	0.08	—	258	258	0.01	< 0.005	—	259
Energy	0.46	0.23	4.15	3.48	0.02	0.32	—	0.32	0.32	—	0.32	—	4,947	4,947	0.44	0.01	—	4,961
Water	—	—	—	—	—	—	—	—	—	—	—	185	0.00	185	19.0	0.45	—	794
Waste	—	—	—	—	—	—	—	—	—	—	—	963	0.00	963	96.2	0.00	—	3,368
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	375	375
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	1.80	1.64	4.59	4.18	0.01	0.24	0.00	0.24	0.24	0.00	0.24	0.00	840	840	0.03	0.01	0.00	842
Total	65.5	62.9	28.7	285	0.74	1.06	11,100	11,101	1.01	1,115	1,116	1,148	77,851	78,998	117	3.42	384	83,324
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	12.8	11.5	21.8	137	0.62	0.39	11,100	11,100	0.37	1,115	1,115	—	63,494	63,494	1.17	3.06	0.25	64,434
Area	37.7	37.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.46	0.23	4.15	3.48	0.02	0.32	—	0.32	0.32	—	0.32	—	4,947	4,947	0.44	0.01	—	4,961
Water	—	—	—	—	—	—	—	—	—	—	—	185	0.00	185	19.0	0.45	—	794
Waste	—	—	—	—	—	—	—	—	—	—	—	963	0.00	963	96.2	0.00	—	3,368
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	375	375
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	1.80	1.64	4.59	4.18	0.01	0.24	0.00	0.24	0.24	0.00	0.24	0.00	840	840	0.03	0.01	0.00	842
Total	52.7	51.0	30.5	145	0.65	0.95	11,100	11,101	0.93	1,115	1,116	1,148	69,281	70,428	117	3.52	375	74,774
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	11.6	10.4	18.5	144	0.57	0.34	9,580	9,580	0.32	962	962	—	58,512	58,512	1.01	2.64	3.58	59,327
Area	46.0	45.3	0.39	46.3	< 0.005	0.08	—	0.08	0.06	—	0.06	—	191	191	0.01	< 0.005	—	191
Energy	0.46	0.23	4.15	3.48	0.02	0.32	—	0.32	0.32	—	0.32	—	4,947	4,947	0.44	0.01	—	4,961
Water	—	—	—	—	—	—	—	—	—	—	—	185	0.00	185	19.0	0.45	—	794
Waste	—	—	—	—	—	—	—	—	—	—	—	963	0.00	963	96.2	0.00	—	3,368

Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	375	375
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	0.25	0.22	0.63	0.57	< 0.005	0.03	0.00	0.03	0.03	0.00	0.03	0.00	115	115	< 0.005	< 0.005	0.00	115
Total	58.3	56.2	23.6	194	0.60	0.77	9,580	9,581	0.73	962	963	1,148	63,765	64,913	117	3.10	379	69,132
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	2.12	1.90	3.37	26.2	0.10	0.06	1,748	1,748	0.06	176	176	—	9,687	9,687	0.17	0.44	0.59	9,822
Area	8.39	8.27	0.07	8.46	< 0.005	0.02	—	0.02	0.01	—	0.01	—	31.6	31.6	< 0.005	< 0.005	—	31.7
Energy	0.08	0.04	0.76	0.64	< 0.005	0.06	—	0.06	0.06	—	0.06	—	819	819	0.07	< 0.005	—	821
Water	—	—	—	—	—	—	—	—	—	—	—	30.6	0.00	30.6	3.14	0.07	—	131
Waste	—	—	—	—	—	—	—	—	—	—	—	159	0.00	159	15.9	0.00	—	558
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	62.1	62.1
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	0.05	0.04	0.11	0.10	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	19.0	19.0	< 0.005	< 0.005	0.00	19.1
Total	10.6	10.3	4.31	35.4	0.11	0.14	1,748	1,749	0.13	176	176	190	10,557	10,747	19.3	0.51	62.7	11,446

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Industrial	14.4	13.0	19.4	214	0.70	0.39	11,100	11,100	0.37	1,115	1,115	—	71,806	71,806	1.16	2.95	9.48	72,725
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	14.4	13.0	19.4	214	0.70	0.39	11,100	11,100	0.37	1,115	1,115	—	71,806	71,806	1.16	2.95	9.48	72,725
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	12.8	11.5	21.8	137	0.62	0.39	11,100	11,100	0.37	1,115	1,115	—	63,494	63,494	1.17	3.06	0.25	64,434
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	12.8	11.5	21.8	137	0.62	0.39	11,100	11,100	0.37	1,115	1,115	—	63,494	63,494	1.17	3.06	0.25	64,434
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	2.12	1.90	3.37	26.2	0.10	0.06	1,748	1,748	0.06	176	176	—	9,687	9,687	0.17	0.44	0.59	9,822
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	2.12	1.90	3.37	26.2	0.10	0.06	1,748	1,748	0.06	176	176	—	9,687	9,687	0.17	0.44	0.59	9,822

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
undefined	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
undefined	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
undefined	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Industrial	0.46	0.23	4.15	3.48	0.02	0.32	—	0.32	0.32	—	0.32	—	4,947	4,947	0.44	0.01	—	4,961
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.46	0.23	4.15	3.48	0.02	0.32	—	0.32	0.32	—	0.32	—	4,947	4,947	0.44	0.01	—	4,961
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	0.46	0.23	4.15	3.48	0.02	0.32	—	0.32	0.32	—	0.32	—	4,947	4,947	0.44	0.01	—	4,961
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.46	0.23	4.15	3.48	0.02	0.32	—	0.32	0.32	—	0.32	—	4,947	4,947	0.44	0.01	—	4,961
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	0.08	0.04	0.76	0.64	< 0.005	0.06	—	0.06	0.06	—	0.06	—	819	819	0.07	< 0.005	—	821
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.08	0.04	0.76	0.64	< 0.005	0.06	—	0.06	0.06	—	0.06	—	819	819	0.07	< 0.005	—	821

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	31.4	31.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architect Coatings	6.31	6.31	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landsca pe Equipm ent	11.2	10.3	0.53	62.7	< 0.005	0.11	—	0.11	0.08	—	0.08	—	258	258	0.01	< 0.005	—	259
Total	48.9	48.0	0.53	62.7	< 0.005	0.11	—	0.11	0.08	—	0.08	—	258	258	0.01	< 0.005	—	259
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consum er Product s	31.4	31.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architect ural Coating s	6.31	6.31	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	37.7	37.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consum er Product s	5.73	5.73	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architect ural Coating s	1.15	1.15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landsca pe Equipm ent	1.51	1.39	0.07	8.46	< 0.005	0.02	—	0.02	0.01	—	0.01	—	31.6	31.6	< 0.005	< 0.005	—	31.7
Total	8.39	8.27	0.07	8.46	< 0.005	0.02	—	0.02	0.01	—	0.01	—	31.6	31.6	< 0.005	< 0.005	—	31.7

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	185	0.00	185	19.0	0.45	—	794
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	185	0.00	185	19.0	0.45	—	794
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	185	0.00	185	19.0	0.45	—	794
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	185	0.00	185	19.0	0.45	—	794
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	30.6	0.00	30.6	3.14	0.07	—	131
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	30.6	0.00	30.6	3.14	0.07	—	131

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	963	0.00	963	96.2	0.00	—	3,368
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	963	0.00	963	96.2	0.00	—	3,368
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	963	0.00	963	96.2	0.00	—	3,368
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	963	0.00	963	96.2	0.00	—	3,368
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	159	0.00	159	15.9	0.00	—	558
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	159	0.00	159	15.9	0.00	—	558

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	375	375
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	375	375
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	375	375
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	375	375
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	62.1	62.1
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	62.1	62.1

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	1.80	1.64	4.59	4.18	0.01	0.24	0.00	0.24	0.24	0.00	0.24	0.00	840	840	0.03	0.01	0.00	842
Total	1.80	1.64	4.59	4.18	0.01	0.24	0.00	0.24	0.24	0.00	0.24	0.00	840	840	0.03	0.01	0.00	842
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	1.80	1.64	4.59	4.18	0.01	0.24	0.00	0.24	0.24	0.00	0.24	0.00	840	840	0.03	0.01	0.00	842
Total	1.80	1.64	4.59	4.18	0.01	0.24	0.00	0.24	0.24	0.00	0.24	0.00	840	840	0.03	0.01	0.00	842
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Emergency	0.05	0.04	0.11	0.10	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	19.0	19.0	< 0.005	< 0.005	0.00	19.1
Total	0.05	0.04	0.11	0.10	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	19.0	19.0	< 0.005	< 0.005	0.00	19.1

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Industrial Park	4,855	3,659	1,786	1,549,605	98,883	74,529	36,384	31,563,506
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	2,160,818	720,273	432,163

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	270

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Industrial Park	54,787,473	0.00	0.0000	0.0000	15,437,481

Parking Lot	6,309,583	0.00	0.0000	0.0000	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Industrial Park	96,554,342	4,273,420
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Industrial Park	1,786	—
Parking Lot	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Industrial Park	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Forklifts	Electric	Average	173	8.00	200	0.20

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
Emergency Generator	Diesel	2.00	1.00	50.0	500	0.73

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	32.8	annual days of extreme heat
Extreme Precipitation	0.00	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.19	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A

Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	11.6
AQ-PM	19.1
AQ-DPM	9.09
Drinking Water	30.6
Lead Risk Housing	50.8
Pesticides	90.5
Toxic Releases	7.58
Traffic	3.06
Effect Indicators	—
CleanUp Sites	74.2
Groundwater	77.9
Haz Waste Facilities/Generators	93.2
Impaired Water Bodies	100.0
Solid Waste	86.5
Sensitive Population	—
Asthma	87.6
Cardio-vascular	83.2
Low Birth Weights	26.9
Socioeconomic Factor Indicators	—
Education	82.7
Housing	51.4
Linguistic	88.8
Poverty	94.9
Unemployment	99.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	16.66880534
Employed	7.173104068
Median HI	5.299627871
Education	—
Bachelor's or higher	5.017323239
High school enrollment	16.8741178
Preschool enrollment	68.89516233
Transportation	—
Auto Access	18.40112922
Active commuting	51.10997049
Social	—
2-parent households	13.28114975
Voting	16.79712563
Neighborhood	—
Alcohol availability	70.25535737
Park access	33.85089183
Retail density	4.311561658
Supermarket access	49.58295907
Tree canopy	0.782753753
Housing	—
Homeownership	38.3036058
Housing habitability	30.96368536
Low-inc homeowner severe housing cost burden	26.76761196
Low-inc renter severe housing cost burden	52.89362248
Uncrowded housing	38.58591043
Health Outcomes	—

Insured adults	21.00603105
Arthritis	0.0
Asthma ER Admissions	30.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	41.7
Cognitively Disabled	50.3
Physically Disabled	19.5
Heart Attack ER Admissions	46.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	54.3
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	14.1
Elderly	42.0

English Speaking	18.7
Foreign-born	65.3
Outdoor Workers	5.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	85.8
Traffic Density	4.9
Traffic Access	23.0
Other Indices	—
Hardship	92.9
Other Decision Support	—
2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	82.0
Healthy Places Index Score for Project Location (b)	11.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Land use data are based on applicant-provided buildout assumptions.
Operations: Vehicle Data	Trip rates are based on ITE Land Use Code 130.
Operations: Landscape Equipment	Assumed 270 summer days for desert region.
Operations: Off-Road Equipment	Assumed offroad equipment as part of project operations.
Operations: Road Dust	All roads used by future developments projects within the Specific Plan Area would be required to be paved. Per ICAPCD guidance a value of 85% paved is assumed in the modeling to account for the high levels of entrained dust generated from vehicle travel on paved roadways in the region.
Operations: Emergency Generators and Fire Pumps	Assumed 2 emergency generators operating 1 hour/day and 50 hours/year for maintenance and testing.
Operations: Water and Waste Water	Water data are based on applicant-provided calculations for the land use.
Characteristics: Utility Information	GHG intensity factors adjusted per RPS requirements.

Lithium Valley Operation - Phase 3 - Commercial Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Lithium Valley Operation - Phase 3 - Commercial
Operational Year	2050
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	4.80
Location	33.18829759139308, -115.6026869228474
County	Imperial
City	Unincorporated
Air District	Imperial County APCD
Air Basin	Salton Sea
TAZ	5600
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Regional Shopping Center	687	1000sqft	686	686,510	343,253	—	—	—
Parking Lot	3,433	1000sqft	78.8	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	213	201	171	1,819	5.25	2.84	82,863	82,866	2.68	8,321	8,323	530	535,607	536,137	65.0	23.1	72.6	544,705
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	183	172	189	1,228	4.63	2.79	82,863	82,866	2.64	8,321	8,323	530	473,051	473,581	65.6	23.8	5.09	482,307
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	156	147	138	1,070	3.58	2.11	59,731	59,733	1.99	5,998	6,000	530	365,635	366,165	62.3	17.5	25.2	372,953
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	28.4	26.8	25.2	195	0.65	0.38	10,901	10,901	0.36	1,095	1,095	87.8	60,535	60,623	10.3	2.89	4.17	61,747

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	190	178	169	1,788	5.24	2.69	82,863	82,866	2.54	8,321	8,323	—	534,007	534,007	11.5	22.7	69.3	541,130

Area	23.3	22.9	0.25	29.9	< 0.005	0.05	—	0.05	0.04	—	0.04	—	123	123	0.01	< 0.005	—	123
Energy	0.14	0.07	1.24	1.04	0.01	0.09	—	0.09	0.09	—	0.09	—	1,477	1,477	0.13	< 0.005	—	1,481
Water	—	—	—	—	—	—	—	—	—	—	—	142	0.00	142	14.5	0.35	—	608
Waste	—	—	—	—	—	—	—	—	—	—	—	388	0.00	388	38.8	0.00	—	1,359
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.30	3.30
Total	213	201	171	1,819	5.25	2.84	82,863	82,866	2.68	8,321	8,323	530	535,607	536,137	65.0	23.1	72.6	544,705
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	165	154	188	1,227	4.62	2.69	82,863	82,866	2.55	8,321	8,323	—	471,574	471,574	12.1	23.4	1.80	478,856
Area	18.0	18.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.14	0.07	1.24	1.04	0.01	0.09	—	0.09	0.09	—	0.09	—	1,477	1,477	0.13	< 0.005	—	1,481
Water	—	—	—	—	—	—	—	—	—	—	—	142	0.00	142	14.5	0.35	—	608
Waste	—	—	—	—	—	—	—	—	—	—	—	388	0.00	388	38.8	0.00	—	1,359
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.30	3.30
Total	183	172	189	1,228	4.63	2.79	82,863	82,866	2.64	8,321	8,323	530	473,051	473,581	65.6	23.8	5.09	482,307
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	134	125	137	1,047	3.57	1.97	59,731	59,733	1.87	5,998	6,000	—	364,067	364,067	8.84	17.1	21.9	369,411
Area	21.9	21.6	0.19	22.1	< 0.005	0.04	—	0.04	0.03	—	0.03	—	90.8	90.8	< 0.005	< 0.005	—	91.2
Energy	0.14	0.07	1.24	1.04	0.01	0.09	—	0.09	0.09	—	0.09	—	1,477	1,477	0.13	< 0.005	—	1,481
Water	—	—	—	—	—	—	—	—	—	—	—	142	0.00	142	14.5	0.35	—	608
Waste	—	—	—	—	—	—	—	—	—	—	—	388	0.00	388	38.8	0.00	—	1,359
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.30	3.30
Total	156	147	138	1,070	3.58	2.11	59,731	59,733	1.99	5,998	6,000	530	365,635	366,165	62.3	17.5	25.2	372,953
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	24.4	22.8	24.9	191	0.65	0.36	10,901	10,901	0.34	1,095	1,095	—	60,275	60,275	1.46	2.83	3.62	61,160
Area	4.00	3.94	0.03	4.03	< 0.005	0.01	—	0.01	0.01	—	0.01	—	15.0	15.0	< 0.005	< 0.005	—	15.1
Energy	0.02	0.01	0.23	0.19	< 0.005	0.02	—	0.02	0.02	—	0.02	—	245	245	0.02	< 0.005	—	245

Water	—	—	—	—	—	—	—	—	—	—	—	23.5	0.00	23.5	2.41	0.06	—	101
Waste	—	—	—	—	—	—	—	—	—	—	—	64.3	0.00	64.3	6.43	0.00	—	225
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.55	0.55
Total	28.4	26.8	25.2	195	0.65	0.38	10,901	10,901	0.36	1,095	1,095	87.8	60,535	60,623	10.3	2.89	4.17	61,747

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	190	178	169	1,788	5.24	2.69	82,863	82,866	2.54	8,321	8,323	—	534,007	534,007	11.5	22.7	69.3	541,130
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	190	178	169	1,788	5.24	2.69	82,863	82,866	2.54	8,321	8,323	—	534,007	534,007	11.5	22.7	69.3	541,130
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	165	154	188	1,227	4.62	2.69	82,863	82,866	2.55	8,321	8,323	—	471,574	471,574	12.1	23.4	1.80	478,856
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Total	165	154	188	1,227	4.62	2.69	82,863	82,866	2.55	8,321	8,323	—	471,574	471,574	12.1	23.4	1.80	478,856
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	24.4	22.8	24.9	191	0.65	0.36	10,901	10,901	0.34	1,095	1,095	—	60,275	60,275	1.46	2.83	3.62	61,160
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	24.4	22.8	24.9	191	0.65	0.36	10,901	10,901	0.34	1,095	1,095	—	60,275	60,275	1.46	2.83	3.62	61,160

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	0.14	0.07	1.24	1.04	0.01	0.09	—	0.09	0.09	—	0.09	—	1,477	1,477	0.13	< 0.005	—	1,481
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.14	0.07	1.24	1.04	0.01	0.09	—	0.09	0.09	—	0.09	—	1,477	1,477	0.13	< 0.005	—	1,481
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Regiona Shopping Center	0.14	0.07	1.24	1.04	0.01	0.09	—	0.09	0.09	—	0.09	—	1,477	1,477	0.13	< 0.005	—	1,481
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.14	0.07	1.24	1.04	0.01	0.09	—	0.09	0.09	—	0.09	—	1,477	1,477	0.13	< 0.005	—	1,481
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	0.02	0.01	0.23	0.19	< 0.005	0.02	—	0.02	0.02	—	0.02	—	245	245	0.02	< 0.005	—	245
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.02	0.01	0.23	0.19	< 0.005	0.02	—	0.02	0.02	—	0.02	—	245	245	0.02	< 0.005	—	245

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	15.0	15.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	3.01	3.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Landscape Equipment	5.32	4.91	0.25	29.9	< 0.005	0.05	—	0.05	0.04	—	0.04	—	123	123	0.01	< 0.005	—	123
Total	23.3	22.9	0.25	29.9	< 0.005	0.05	—	0.05	0.04	—	0.04	—	123	123	0.01	< 0.005	—	123
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	15.0	15.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	3.01	3.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	18.0	18.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	2.73	2.73	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.55	0.55	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.72	0.66	0.03	4.03	< 0.005	0.01	—	0.01	0.01	—	0.01	—	15.0	15.0	< 0.005	< 0.005	—	15.1
Total	4.00	3.94	0.03	4.03	< 0.005	0.01	—	0.01	0.01	—	0.01	—	15.0	15.0	< 0.005	< 0.005	—	15.1

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	142	0.00	142	14.5	0.35	—	608
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	142	0.00	142	14.5	0.35	—	608
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	142	0.00	142	14.5	0.35	—	608
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	142	0.00	142	14.5	0.35	—	608
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	23.5	0.00	23.5	2.41	0.06	—	101
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	23.5	0.00	23.5	2.41	0.06	—	101

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	388	0.00	388	38.8	0.00	—	1,359
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	388	0.00	388	38.8	0.00	—	1,359
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	388	0.00	388	38.8	0.00	—	1,359
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	388	0.00	388	38.8	0.00	—	1,359
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	64.3	0.00	64.3	6.43	0.00	—	225
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	64.3	0.00	64.3	6.43	0.00	—	225

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.30	3.30
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.30	3.30
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.30	3.30
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.30	3.30
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.55	0.55
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.55	0.55

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Regional Shopping Center	64,868	79,251	36,255	22,934,877	539,667	738,185	337,695	196,798,506
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	1,029,765	343,255	205,950

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	270

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Regional Shopping Center	10,149,405	0.00	0.0000	0.0000	4,608,382
Parking Lot	3,006,870	0.00	0.0000	0.0000	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Regional Shopping Center	73,962,868	10,219,734
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Regional Shopping Center	721	—
Parking Lot	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Regional Shopping Center	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Regional Shopping Center	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	32.8	annual days of extreme heat
Extreme Precipitation	0.00	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.19	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	11.6

AQ-PM	19.1
AQ-DPM	9.09
Drinking Water	30.6
Lead Risk Housing	50.8
Pesticides	90.5
Toxic Releases	7.58
Traffic	3.06
Effect Indicators	—
CleanUp Sites	74.2
Groundwater	77.9
Haz Waste Facilities/Generators	93.2
Impaired Water Bodies	100.0
Solid Waste	86.5
Sensitive Population	—
Asthma	87.6
Cardio-vascular	83.2
Low Birth Weights	26.9
Socioeconomic Factor Indicators	—
Education	82.7
Housing	51.4
Linguistic	88.8
Poverty	94.9
Unemployment	99.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—

Above Poverty	16.66880534
Employed	7.173104068
Median HI	5.299627871
Education	—
Bachelor's or higher	5.017323239
High school enrollment	16.8741178
Preschool enrollment	68.89516233
Transportation	—
Auto Access	18.40112922
Active commuting	51.10997049
Social	—
2-parent households	13.28114975
Voting	16.79712563
Neighborhood	—
Alcohol availability	70.25535737
Park access	33.85089183
Retail density	4.311561658
Supermarket access	49.58295907
Tree canopy	0.782753753
Housing	—
Homeownership	38.3036058
Housing habitability	30.96368536
Low-inc homeowner severe housing cost burden	26.76761196
Low-inc renter severe housing cost burden	52.89362248
Uncrowded housing	38.58591043
Health Outcomes	—
Insured adults	21.00603105
Arthritis	0.0

Asthma ER Admissions	30.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	41.7
Cognitively Disabled	50.3
Physically Disabled	19.5
Heart Attack ER Admissions	46.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	54.3
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	14.1
Elderly	42.0
English Speaking	18.7
Foreign-born	65.3

Outdoor Workers	5.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	85.8
Traffic Density	4.9
Traffic Access	23.0
Other Indices	—
Hardship	92.9
Other Decision Support	—
2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	82.0
Healthy Places Index Score for Project Location (b)	11.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Land use data are based on applicant-provided buildout assumptions.
Operations: Landscape Equipment	Assumed 270 summer days for desert region.
Operations: Water and Waste Water	Water calculation based on applicant-provided figures.
Operations: Vehicle Data	Trip rates changed based on suggested ITE trip rates.
Operations: Road Dust	All roads used by future developments projects within the Specific Plan Area would be required to be paved. Per ICAPCD guidance a value of 85% paved is assumed in the modeling to account for the high levels of entrained dust generated from vehicle travel on paved roadways in the region.
Characteristics: Utility Information	GHG intensity factors adjusted per RPS requirements.

Lithium Valley Operation - Phase 3 - Data Centers Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Lithium Valley Operation - Phase 3 - Data Centers
Operational Year	2050
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	4.80
Location	33.18829759139308, -115.6026869228474
County	Imperial
City	Unincorporated
Air District	Imperial County APCD
Air Basin	Salton Sea
TAZ	5600
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
General Heavy Industry	3,597	1000sqft	2,068	3,596,589	1,798,295	—	—	—
Parking Lot	17,983	1000sqft	413	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1,870	1,711	7,070	4,431	8.42	232	13,322	13,555	232	1,338	1,570	4,220	892,757	896,978	460	14.3	948	913,692
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1,840	1,683	7,071	4,182	8.32	232	13,322	13,554	232	1,338	1,570	4,220	882,138	886,358	460	14.4	937	903,096
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	363	339	984	803	1.59	32.3	9,101	9,134	32.2	914	946	4,220	166,466	170,686	432	7.80	940	184,749
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	66.2	61.8	180	146	0.29	5.89	1,661	1,667	5.88	167	173	699	27,560	28,259	71.5	1.29	156	30,587

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	17.3	15.6	23.3	257	0.85	0.47	13,322	13,323	0.45	1,338	1,338	—	86,181	86,181	1.39	3.55	11.4	87,283

Area	122	120	1.32	156	0.01	0.28	—	0.28	0.21	—	0.21	—	643	643	0.03	0.01	—	646
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	1,817	0.00	1,817	186	4.43	—	7,794
Waste	—	—	—	—	—	—	—	—	—	—	—	2,404	0.00	2,404	240	0.00	—	8,409
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	936	936
Stationary	1,731	1,575	7,045	4,017	7.57	232	0.00	232	232	0.00	232	0.00	805,934	805,934	32.4	6.31	0.00	808,624
Total	1,870	1,711	7,070	4,431	8.42	232	13,322	13,555	232	1,338	1,570	4,220	892,757	896,978	460	14.3	948	913,692
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	15.3	13.8	26.1	165	0.75	0.47	13,322	13,323	0.45	1,338	1,338	—	76,204	76,204	1.40	3.67	0.29	77,333
Area	94.1	94.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	1,817	0.00	1,817	186	4.43	—	7,794
Waste	—	—	—	—	—	—	—	—	—	—	—	2,404	0.00	2,404	240	0.00	—	8,409
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	936	936
Stationary	1,731	1,575	7,045	4,017	7.57	232	0.00	232	232	0.00	232	0.00	805,934	805,934	32.4	6.31	0.00	808,624
Total	1,840	1,683	7,071	4,182	8.32	232	13,322	13,554	232	1,338	1,570	4,220	882,138	886,358	460	14.4	937	903,096
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	11.0	9.90	17.5	137	0.54	0.33	9,101	9,102	0.31	914	914	—	55,588	55,588	0.96	2.51	3.40	56,362
Area	115	113	0.97	116	0.01	0.21	—	0.21	0.16	—	0.16	—	476	476	0.02	< 0.005	—	478
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	1,817	0.00	1,817	186	4.43	—	7,794
Waste	—	—	—	—	—	—	—	—	—	—	—	2,404	0.00	2,404	240	0.00	—	8,409
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	936	936
Stationary	237	216	965	550	1.04	31.7	0.00	31.7	31.7	0.00	31.7	0.00	110,402	110,402	4.43	0.86	0.00	110,770
Total	363	339	984	803	1.59	32.3	9,101	9,134	32.2	914	946	4,220	166,466	170,686	432	7.80	940	184,749

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	2.01	1.81	3.20	24.9	0.10	0.06	1,661	1,661	0.06	167	167	—	9,203	9,203	0.16	0.41	0.56	9,331
Area	20.9	20.7	0.18	21.1	< 0.005	0.04	—	0.04	0.03	—	0.03	—	78.8	78.8	< 0.005	< 0.005	—	79.1
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	301	0.00	301	30.8	0.73	—	1,290
Waste	—	—	—	—	—	—	—	—	—	—	—	398	0.00	398	39.8	0.00	—	1,392
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	155	155
Stationary	43.3	39.4	176	100	0.19	5.79	0.00	5.79	5.79	0.00	5.79	0.00	18,278	18,278	0.73	0.14	0.00	18,339
Total	66.2	61.8	180	146	0.29	5.89	1,661	1,667	5.88	167	173	699	27,560	28,259	71.5	1.29	156	30,587

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	17.3	15.6	23.3	257	0.85	0.47	13,322	13,323	0.45	1,338	1,338	—	86,181	86,181	1.39	3.55	11.4	87,283
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	17.3	15.6	23.3	257	0.85	0.47	13,322	13,323	0.45	1,338	1,338	—	86,181	86,181	1.39	3.55	11.4	87,283
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	15.3	13.8	26.1	165	0.75	0.47	13,322	13,323	0.45	1,338	1,338	—	76,204	76,204	1.40	3.67	0.29	77,333
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	15.3	13.8	26.1	165	0.75	0.47	13,322	13,323	0.45	1,338	1,338	—	76,204	76,204	1.40	3.67	0.29	77,333
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	2.01	1.81	3.20	24.9	0.10	0.06	1,661	1,661	0.06	167	167	—	9,203	9,203	0.16	0.41	0.56	9,331
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	2.01	1.81	3.20	24.9	0.10	0.06	1,661	1,661	0.06	167	167	—	9,203	9,203	0.16	0.41	0.56	9,331

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	78.4	78.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	15.8	15.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	27.9	25.7	1.32	156	0.01	0.28	—	0.28	0.21	—	0.21	—	643	643	0.03	0.01	—	646
Total	122	120	1.32	156	0.01	0.28	—	0.28	0.21	—	0.21	—	643	643	0.03	0.01	—	646
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Consum Products	78.4	78.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	15.8	15.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	94.1	94.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	14.3	14.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	2.88	2.88	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	3.76	3.47	0.18	21.1	< 0.005	0.04	—	0.04	0.03	—	0.03	—	78.8	78.8	< 0.005	< 0.005	—	79.1
Total	20.9	20.7	0.18	21.1	< 0.005	0.04	—	0.04	0.03	—	0.03	—	78.8	78.8	< 0.005	< 0.005	—	79.1

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	1,817	0.00	1,817	186	4.43	—	7,794

Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1,817	0.00	1,817	186	4.43	—	7,794
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	1,817	0.00	1,817	186	4.43	—	7,794
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1,817	0.00	1,817	186	4.43	—	7,794
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	301	0.00	301	30.8	0.73	—	1,290
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	301	0.00	301	30.8	0.73	—	1,290

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	2,404	0.00	2,404	240	0.00	—	8,409
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Total	—	—	—	—	—	—	—	—	—	—	—	2,404	0.00	2,404	240	0.00	—	8,409
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	2,404	0.00	2,404	240	0.00	—	8,409
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	2,404	0.00	2,404	240	0.00	—	8,409
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	398	0.00	398	39.8	0.00	—	1,392
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	398	0.00	398	39.8	0.00	—	1,392

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	936	936
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	936	936
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	936	936
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	936	936
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	155	155
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	155	155

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipm Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	1,731	1,575	7,045	4,017	7.57	232	0.00	232	232	0.00	232	0.00	805,934	805,934	32.4	6.31	0.00	808,624
Total	1,731	1,575	7,045	4,017	7.57	232	0.00	232	232	0.00	232	0.00	805,934	805,934	32.4	6.31	0.00	808,624
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	1,731	1,575	7,045	4,017	7.57	232	0.00	232	232	0.00	232	0.00	805,934	805,934	32.4	6.31	0.00	808,624
Total	1,731	1,575	7,045	4,017	7.57	232	0.00	232	232	0.00	232	0.00	805,934	805,934	32.4	6.31	0.00	808,624
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	43.3	39.4	176	100	0.19	5.79	0.00	5.79	5.79	0.00	5.79	0.00	18,278	18,278	0.73	0.14	0.00	18,339
Total	43.3	39.4	176	100	0.19	5.79	0.00	5.79	5.79	0.00	5.79	0.00	18,278	18,278	0.73	0.14	0.00	18,339

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Remove	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
General Heavy Industry	3,561	5,826	4,604	1,472,161	72,525	118,678	93,770	29,986,079
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	5,394,884	1,798,295	1,078,977

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	270

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
General Heavy Industry	6,301,224,509	0.00	0.0000	0.0000	0.00
Parking Lot	15,753,064	0.00	0.0000	0.0000	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
General Heavy Industry	948,189,156	41,966,115
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
General Heavy Industry	4,460	—
Parking Lot	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
General Heavy Industry	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
Emergency Generator	Diesel	240	1.00	50.0	4,000	0.73

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	32.8	annual days of extreme heat
Extreme Precipitation	0.00	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.19	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A

Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	11.6
AQ-PM	19.1
AQ-DPM	9.09
Drinking Water	30.6
Lead Risk Housing	50.8
Pesticides	90.5
Toxic Releases	7.58
Traffic	3.06
Effect Indicators	—
CleanUp Sites	74.2
Groundwater	77.9

Haz Waste Facilities/Generators	93.2
Impaired Water Bodies	100.0
Solid Waste	86.5
Sensitive Population	—
Asthma	87.6
Cardio-vascular	83.2
Low Birth Weights	26.9
Socioeconomic Factor Indicators	—
Education	82.7
Housing	51.4
Linguistic	88.8
Poverty	94.9
Unemployment	99.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	16.66880534
Employed	7.173104068
Median HI	5.299627871
Education	—
Bachelor's or higher	5.017323239
High school enrollment	16.8741178
Preschool enrollment	68.89516233
Transportation	—
Auto Access	18.40112922
Active commuting	51.10997049

Social	—
2-parent households	13.28114975
Voting	16.79712563
Neighborhood	—
Alcohol availability	70.25535737
Park access	33.85089183
Retail density	4.311561658
Supermarket access	49.58295907
Tree canopy	0.782753753
Housing	—
Homeownership	38.3036058
Housing habitability	30.96368536
Low-inc homeowner severe housing cost burden	26.76761196
Low-inc renter severe housing cost burden	52.89362248
Uncrowded housing	38.58591043
Health Outcomes	—
Insured adults	21.00603105
Arthritis	0.0
Asthma ER Admissions	30.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	41.7
Cognitively Disabled	50.3
Physically Disabled	19.5

Heart Attack ER Admissions	46.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	54.3
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	14.1
Elderly	42.0
English Speaking	18.7
Foreign-born	65.3
Outdoor Workers	5.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	85.8
Traffic Density	4.9
Traffic Access	23.0
Other Indices	—
Hardship	92.9
Other Decision Support	—
2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	82.0
Healthy Places Index Score for Project Location (b)	11.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Land use data are based on applicant-provided buildout assumptions.
Operations: Vehicle Data	Trip rates based on ITE Land Use Code 160.
Operations: Landscape Equipment	Assumed 270 summer days for desert region.
Operations: Emergency Generators and Fire Pumps	Assumed 240 back-up generators operating 1 hour/day and 50 hours/year for maintenance and testing.
Operations: Road Dust	All roads used by future developments projects within the Specific Plan Area would be required to be paved. Per ICAPCD guidance a value of 85% paved is assumed in the modeling to account for the high levels of entrained dust generated from vehicle travel on paved roadways in the region.
Operations: Water and Waste Water	Water data are based on applicant-provided calculations for the land use.

Operations: Energy Use	Electricity data are based on anticipated electricity demand of data center.
Characteristics: Utility Information	GHG intensity factors adjusted per RPS requirements.
Operations: Generators + Pumps EF	NOx and PM emission data based on tier 4 emissions standards.

Lithium Valley Operation - Phase 3 - Emergency Services Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Lithium Valley Operation - Phase 3 - Emergency Services
Operational Year	2050
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	4.80
Location	33.18829759139308, -115.6026869228474
County	Imperial
City	Unincorporated
Air District	Imperial County APCD
Air Basin	Salton Sea
TAZ	5600
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
General Heavy Industry	602	1000sqft	516	601,719	120,344	—	—	—
Parking Lot	1,203	1000sqft	27.6	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	40.0	37.6	38.1	252	0.74	1.55	10,786	10,788	1.52	1,083	1,085	946	78,668	79,614	97.8	4.23	166	83,484
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	33.8	31.7	40.2	150	0.66	1.50	10,786	10,788	1.48	1,083	1,085	946	70,483	71,429	97.8	4.33	157	75,319
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	29.1	27.6	21.5	136	0.48	0.80	7,383	7,383	0.77	741	742	946	51,779	52,726	97.3	3.37	159	56,324
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	5.31	5.03	3.93	24.9	0.09	0.15	1,347	1,347	0.14	135	135	157	8,573	8,729	16.1	0.56	26.4	9,325

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	14.0	12.7	18.9	208	0.68	0.38	10,786	10,787	0.36	1,083	1,083	—	69,777	69,777	1.12	2.87	9.21	70,670

Area	20.1	19.7	0.22	26.2	< 0.005	0.05	—	0.05	0.04	—	0.04	—	108	108	< 0.005	< 0.005	—	108
Energy	0.58	0.29	5.25	4.41	0.03	0.40	—	0.40	0.40	—	0.40	—	6,264	6,264	0.55	0.01	—	6,282
Water	—	—	—	—	—	—	—	—	—	—	—	544	0.00	544	55.8	1.33	—	2,334
Waste	—	—	—	—	—	—	—	—	—	—	—	402	0.00	402	40.2	0.00	—	1,407
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	157	157
Stationary	5.41	4.92	13.8	12.6	0.02	0.72	0.00	0.72	0.72	0.00	0.72	0.00	2,519	2,519	0.10	0.02	0.00	2,527
Total	40.0	37.6	38.1	252	0.74	1.55	10,786	10,788	1.52	1,083	1,085	946	78,668	79,614	97.8	4.23	166	83,484
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	12.4	11.1	21.2	133	0.60	0.38	10,786	10,787	0.36	1,083	1,083	—	61,700	61,700	1.13	2.97	0.24	62,613
Area	15.4	15.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.58	0.29	5.25	4.41	0.03	0.40	—	0.40	0.40	—	0.40	—	6,264	6,264	0.55	0.01	—	6,282
Water	—	—	—	—	—	—	—	—	—	—	—	544	0.00	544	55.8	1.33	—	2,334
Waste	—	—	—	—	—	—	—	—	—	—	—	402	0.00	402	40.2	0.00	—	1,407
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	157	157
Stationary	5.41	4.92	13.8	12.6	0.02	0.72	0.00	0.72	0.72	0.00	0.72	0.00	2,519	2,519	0.10	0.02	0.00	2,527
Total	33.8	31.7	40.2	150	0.66	1.50	10,786	10,788	1.48	1,083	1,085	946	70,483	71,429	97.8	4.33	157	75,319
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	8.93	8.03	14.2	111	0.44	0.26	7,383	7,383	0.25	741	742	—	45,090	45,090	0.78	2.03	2.76	45,718
Area	18.8	18.6	0.16	19.4	< 0.005	0.03	—	0.03	0.03	—	0.03	—	79.6	79.6	< 0.005	< 0.005	—	79.9
Energy	0.58	0.29	5.25	4.41	0.03	0.40	—	0.40	0.40	—	0.40	—	6,264	6,264	0.55	0.01	—	6,282
Water	—	—	—	—	—	—	—	—	—	—	—	544	0.00	544	55.8	1.33	—	2,334
Waste	—	—	—	—	—	—	—	—	—	—	—	402	0.00	402	40.2	0.00	—	1,407
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	157	157
Stationary	0.74	0.67	1.88	1.72	< 0.005	0.10	0.00	0.10	0.10	0.00	0.10	0.00	345	345	0.01	< 0.005	0.00	346
Total	29.1	27.6	21.5	136	0.48	0.80	7,383	7,383	0.77	741	742	946	51,779	52,726	97.3	3.37	159	56,324

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.63	1.47	2.60	20.2	0.08	0.05	1,347	1,347	0.05	135	135	—	7,465	7,465	0.13	0.34	0.46	7,569
Area	3.44	3.39	0.03	3.53	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	13.2	13.2	< 0.005	< 0.005	—	13.2
Energy	0.11	0.05	0.96	0.80	0.01	0.07	—	0.07	0.07	—	0.07	—	1,037	1,037	0.09	< 0.005	—	1,040
Water	—	—	—	—	—	—	—	—	—	—	—	90.1	0.00	90.1	9.24	0.22	—	386
Waste	—	—	—	—	—	—	—	—	—	—	—	66.6	0.00	66.6	6.65	0.00	—	233
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	25.9	25.9
Stationary	0.14	0.12	0.34	0.31	< 0.005	0.02	0.00	0.02	0.02	0.00	0.02	0.00	57.1	57.1	< 0.005	< 0.005	0.00	57.3
Total	5.31	5.03	3.93	24.9	0.09	0.15	1,347	1,347	0.14	135	135	157	8,573	8,729	16.1	0.56	26.4	9,325

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	14.0	12.7	18.9	208	0.68	0.38	10,786	10,787	0.36	1,083	1,083	—	69,777	69,777	1.12	2.87	9.21	70,670
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	14.0	12.7	18.9	208	0.68	0.38	10,786	10,787	0.36	1,083	1,083	—	69,777	69,777	1.12	2.87	9.21	70,670
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	12.4	11.1	21.2	133	0.60	0.38	10,786	10,787	0.36	1,083	1,083	—	61,700	61,700	1.13	2.97	0.24	62,613
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	12.4	11.1	21.2	133	0.60	0.38	10,786	10,787	0.36	1,083	1,083	—	61,700	61,700	1.13	2.97	0.24	62,613
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	1.63	1.47	2.60	20.2	0.08	0.05	1,347	1,347	0.05	135	135	—	7,465	7,465	0.13	0.34	0.46	7,569
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	1.63	1.47	2.60	20.2	0.08	0.05	1,347	1,347	0.05	135	135	—	7,465	7,465	0.13	0.34	0.46	7,569

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.58	0.29	5.25	4.41	0.03	0.40	—	0.40	0.40	—	0.40	—	6,264	6,264	0.55	0.01	—	6,282
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.58	0.29	5.25	4.41	0.03	0.40	—	0.40	0.40	—	0.40	—	6,264	6,264	0.55	0.01	—	6,282
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.58	0.29	5.25	4.41	0.03	0.40	—	0.40	0.40	—	0.40	—	6,264	6,264	0.55	0.01	—	6,282

Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.58	0.29	5.25	4.41	0.03	0.40	—	0.40	0.40	—	0.40	—	6,264	6,264	0.55	0.01	—	6,282
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.11	0.05	0.96	0.80	0.01	0.07	—	0.07	0.07	—	0.07	—	1,037	1,037	0.09	< 0.005	—	1,040
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.11	0.05	0.96	0.80	0.01	0.07	—	0.07	0.07	—	0.07	—	1,037	1,037	0.09	< 0.005	—	1,040

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	13.0	13.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	2.43	2.43	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	4.66	4.30	0.22	26.2	< 0.005	0.05	—	0.05	0.04	—	0.04	—	108	108	< 0.005	< 0.005	—	108
Total	20.1	19.7	0.22	26.2	< 0.005	0.05	—	0.05	0.04	—	0.04	—	108	108	< 0.005	< 0.005	—	108
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Consum Products	13.0	13.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	2.43	2.43	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	15.4	15.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	2.37	2.37	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.44	0.44	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.63	0.58	0.03	3.53	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	13.2	13.2	< 0.005	< 0.005	—	13.2
Total	3.44	3.39	0.03	3.53	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	13.2	13.2	< 0.005	< 0.005	—	13.2

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	544	0.00	544	55.8	1.33	—	2,334

Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	544	0.00	544	55.8	1.33	—	2,334
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	544	0.00	544	55.8	1.33	—	2,334
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	544	0.00	544	55.8	1.33	—	2,334
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	90.1	0.00	90.1	9.24	0.22	—	386
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	90.1	0.00	90.1	9.24	0.22	—	386

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	402	0.00	402	40.2	0.00	—	1,407
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Total	—	—	—	—	—	—	—	—	—	—	—	402	0.00	402	40.2	0.00	—	1,407
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	402	0.00	402	40.2	0.00	—	1,407
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	402	0.00	402	40.2	0.00	—	1,407
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	66.6	0.00	66.6	6.65	0.00	—	233
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	66.6	0.00	66.6	6.65	0.00	—	233

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	157	157
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	157	157
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	157	157
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	157	157
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	25.9	25.9
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	25.9	25.9

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipm Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	5.41	4.92	13.8	12.6	0.02	0.72	0.00	0.72	0.72	0.00	0.72	0.00	2,519	2,519	0.10	0.02	0.00	2,527
Total	5.41	4.92	13.8	12.6	0.02	0.72	0.00	0.72	0.72	0.00	0.72	0.00	2,519	2,519	0.10	0.02	0.00	2,527
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	5.41	4.92	13.8	12.6	0.02	0.72	0.00	0.72	0.72	0.00	0.72	0.00	2,519	2,519	0.10	0.02	0.00	2,527
Total	5.41	4.92	13.8	12.6	0.02	0.72	0.00	0.72	0.72	0.00	0.72	0.00	2,519	2,519	0.10	0.02	0.00	2,527
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.14	0.12	0.34	0.31	< 0.005	0.02	0.00	0.02	0.02	0.00	0.02	0.00	57.1	57.1	< 0.005	< 0.005	0.00	57.3
Total	0.14	0.12	0.34	0.31	< 0.005	0.02	0.00	0.02	0.02	0.00	0.02	0.00	57.1	57.1	< 0.005	< 0.005	0.00	57.3

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Remove	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
General Heavy Industry	2,888	4,717	3,743	1,194,146	58,830	96,089	76,234	24,323,255
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	902,579	300,860	72,206

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	270

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
General Heavy Industry	18,276,869	0.00	0.0000	0.0000	19,546,603
Parking Lot	1,054,212	0.00	0.0000	0.0000	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
General Heavy Industry	283,947,677	5,026,921
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
General Heavy Industry	746	—
Parking Lot	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
General Heavy Industry	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
Emergency Generator	Diesel	6.00	1.00	50.0	500	0.73

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	32.8	annual days of extreme heat
Extreme Precipitation	0.00	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.19	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A

Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	11.6
AQ-PM	19.1
AQ-DPM	9.09
Drinking Water	30.6
Lead Risk Housing	50.8
Pesticides	90.5
Toxic Releases	7.58
Traffic	3.06
Effect Indicators	—
CleanUp Sites	74.2
Groundwater	77.9

Haz Waste Facilities/Generators	93.2
Impaired Water Bodies	100.0
Solid Waste	86.5
Sensitive Population	—
Asthma	87.6
Cardio-vascular	83.2
Low Birth Weights	26.9
Socioeconomic Factor Indicators	—
Education	82.7
Housing	51.4
Linguistic	88.8
Poverty	94.9
Unemployment	99.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	16.66880534
Employed	7.173104068
Median HI	5.299627871
Education	—
Bachelor's or higher	5.017323239
High school enrollment	16.8741178
Preschool enrollment	68.89516233
Transportation	—
Auto Access	18.40112922
Active commuting	51.10997049

Social	—
2-parent households	13.28114975
Voting	16.79712563
Neighborhood	—
Alcohol availability	70.25535737
Park access	33.85089183
Retail density	4.311561658
Supermarket access	49.58295907
Tree canopy	0.782753753
Housing	—
Homeownership	38.3036058
Housing habitability	30.96368536
Low-inc homeowner severe housing cost burden	26.76761196
Low-inc renter severe housing cost burden	52.89362248
Uncrowded housing	38.58591043
Health Outcomes	—
Insured adults	21.00603105
Arthritis	0.0
Asthma ER Admissions	30.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	41.7
Cognitively Disabled	50.3
Physically Disabled	19.5

Heart Attack ER Admissions	46.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	54.3
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	14.1
Elderly	42.0
English Speaking	18.7
Foreign-born	65.3
Outdoor Workers	5.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	85.8
Traffic Density	4.9
Traffic Access	23.0
Other Indices	—
Hardship	92.9
Other Decision Support	—
2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	82.0
Healthy Places Index Score for Project Location (b)	11.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Land use data are based on applicant-provided buildout assumptions.
Operations: Vehicle Data	Trip rates are based on ITE Land Use Code 575 PM rate.
Operations: Landscape Equipment	Assumed 270 summer days for desert region.
Operations: Road Dust	All roads used by future developments projects within the Specific Plan Area would be required to be paved. Per ICAPCD guidance a value of 85% paved is assumed in the modeling to account for the high levels of entrained dust generated from vehicle travel on paved roadways in the region.
Operations: Water and Waste Water	Water data are based on applicant-provided calculations for the land use.
Operations: Emergency Generators and Fire Pumps	Assumed 6 back-up generators operating 1 hour/day and 50 hours/year for maintenance and testing.

Characteristics: Utility Information	GHG intensity factors adjusted per RPS requirements.

Lithium Valley Operation - Phase 3 - EV Charging Stations Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Lithium Valley Operation - Phase 3 - EV Charging Stations
Operational Year	2050
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	4.80
Location	33.18829759139308, -115.6026869228474
County	Imperial
City	Unincorporated
Air District	Imperial County APCD
Air Basin	Salton Sea
TAZ	5600
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Parking Lot	6,408	1000sqft	147	0.00	1,281,652	—	—	—
Other Asphalt Surfaces	6,408	1000sqft	147	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.47	2.47	0.00	0.00	0.00	0.00	35,320	35,320	0.00	3,554	3,554	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.47	2.47	0.00	0.00	0.00	0.00	35,320	35,320	0.00	3,554	3,554	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.47	2.47	0.00	0.00	0.00	0.00	34,809	34,809	0.00	3,493	3,493	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.45	0.45	0.00	0.00	0.00	0.00	6,353	6,353	0.00	637	637	0.00	0.00	0.00	0.00	0.00	0.00	0.00

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	35,320	35,320	0.00	3,554	3,554	—	0.00	0.00	0.00	0.00	0.00	0.00

Area	2.47	2.47	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	2.47	2.47	0.00	0.00	0.00	0.00	35,320	35,320	0.00	3,554	3,554	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	35,320	35,320	0.00	3,554	3,554	—	0.00	0.00	0.00	0.00	0.00	0.00
Area	2.47	2.47	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	2.47	2.47	0.00	0.00	0.00	0.00	35,320	35,320	0.00	3,554	3,554	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	34,809	34,809	0.00	3,493	3,493	—	0.00	0.00	0.00	0.00	0.00	0.00
Area	2.47	2.47	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	2.47	2.47	0.00	0.00	0.00	0.00	34,809	34,809	0.00	3,493	3,493	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	6,353	6,353	0.00	637	637	—	0.00	0.00	0.00	0.00	0.00	0.00
Area	0.45	0.45	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	0.45	0.45	0.00	0.00	0.00	0.00	6,353	6,353	0.00	637	637	0.00	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	21,022	21,022	0.00	2,119	2,119	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	14,298	14,298	0.00	1,435	1,435	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	35,320	35,320	0.00	3,554	3,554	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	21,022	21,022	0.00	2,119	2,119	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	14,298	14,298	0.00	1,435	1,435	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	35,320	35,320	0.00	3,554	3,554	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	3,778	3,778	0.00	379	379	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	2,575	2,575	0.00	258	258	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	6,353	6,353	0.00	637	637	—	0.00	0.00	0.00	0.00	0.00	0.00

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	1.01	1.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	1.47	1.47	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	2.47	2.47	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	1.01	1.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	1.47	1.47	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	2.47	2.47	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.18	0.18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.27	0.27	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Landscape	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.45	0.45	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Parking Lot	9,178	9,178	9,178	3,349,941	186,943	186,943	186,943	68,234,107
Other Asphalt Surfaces	6,254	6,254	6,254	2,282,814	127,392	127,392	127,392	46,498,060

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	0.00	0.00	768,921

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	270

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Parking Lot	28,548,231	0.00	0.0000	0.0000	0.00
Other Asphalt Surfaces	0.00	0.00	0.0000	0.0000	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Parking Lot	0.00	16,544,039
Other Asphalt Surfaces	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)

Parking Lot	0.00	—
Other Asphalt Surfaces	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	32.8	annual days of extreme heat
Extreme Precipitation	0.00	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.19	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	11.6
AQ-PM	19.1
AQ-DPM	9.09
Drinking Water	30.6
Lead Risk Housing	50.8
Pesticides	90.5
Toxic Releases	7.58
Traffic	3.06
Effect Indicators	—
CleanUp Sites	74.2
Groundwater	77.9
Haz Waste Facilities/Generators	93.2
Impaired Water Bodies	100.0
Solid Waste	86.5
Sensitive Population	—
Asthma	87.6

Cardio-vascular	83.2
Low Birth Weights	26.9
Socioeconomic Factor Indicators	—
Education	82.7
Housing	51.4
Linguistic	88.8
Poverty	94.9
Unemployment	99.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	16.66880534
Employed	7.173104068
Median HI	5.299627871
Education	—
Bachelor's or higher	5.017323239
High school enrollment	16.8741178
Preschool enrollment	68.89516233
Transportation	—
Auto Access	18.40112922
Active commuting	51.10997049
Social	—
2-parent households	13.28114975
Voting	16.79712563
Neighborhood	—
Alcohol availability	70.25535737

Park access	33.85089183
Retail density	4.311561658
Supermarket access	49.58295907
Tree canopy	0.782753753
Housing	—
Homeownership	38.3036058
Housing habitability	30.96368536
Low-inc homeowner severe housing cost burden	26.76761196
Low-inc renter severe housing cost burden	52.89362248
Uncrowded housing	38.58591043
Health Outcomes	—
Insured adults	21.00603105
Arthritis	0.0
Asthma ER Admissions	30.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	41.7
Cognitively Disabled	50.3
Physically Disabled	19.5
Heart Attack ER Admissions	46.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	54.3

Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	14.1
Elderly	42.0
English Speaking	18.7
Foreign-born	65.3
Outdoor Workers	5.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	85.8
Traffic Density	4.9
Traffic Access	23.0
Other Indices	—
Hardship	92.9
Other Decision Support	—
2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	82.0
Healthy Places Index Score for Project Location (b)	11.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes

Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Operations: Landscape Equipment	Assumed 270 summer days for desert region.
Operations: Road Dust	All roads used by future developments projects within the Specific Plan Area would be required to be paved. Per ICAPCD guidance a value of 85% paved is assumed in the modeling to account for the high levels of entrained dust generated from vehicle travel on paved roadways in the region.
Operations: Fleet Mix	"Parking Lot" land use subtype encompasses EV truck trips, conservatively assumed to be 100% HHD vehicles. "Other Asphalt Surfaces" land use subtype encompasses passenger vehicle trips, conservatively assumed to be 50% LDA and 50% LDT1 vehicles.
Operations: Vehicle Data	Trip rates adjusted per EV charging station trip generation methodology.
Operations: Vehicle EF	EV vehicle trips only emit PM from tire and break wear and tear. All other emission factors assumed to be 0, for those applicable vehicle classes.
Operations: Energy Use	Electricity demand is based on example EV charging stations and scaled based on project size.
Land Use	Land use data are based on applicant-provided buildout assumptions.
Operations: Water and Waste Water	Water data are based on applicant-provided calculations for the land use
Characteristics: Utility Information	GHG intensity factors adjusted per RPS requirements.

Lithium Valley Operation - Phase 3 - Floatovoltaics Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Lithium Valley Operation - Phase 3 - Floatovoltaics
Operational Year	2050
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	4.80
Location	33.18829759139308, -115.6026869228474
County	Imperial
City	Unincorporated
Air District	Imperial County APCD
Air Basin	Salton Sea
TAZ	5600
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
General Heavy Industry	10.0	1000sqft	208	10,000	2,000	—	—	—
Parking Lot	20.0	1000sqft	0.46	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.24	1.15	2.31	2.63	< 0.005	0.12	5.39	5.51	0.12	0.54	0.66	6.68	456	462	0.69	< 0.005	36.1	517
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.16	1.08	2.30	2.16	< 0.005	0.12	5.39	5.51	0.12	0.54	0.66	6.68	450	457	0.69	< 0.005	36.1	511
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.44	0.43	0.32	0.66	< 0.005	0.02	3.80	3.82	0.02	0.38	0.40	6.68	81.5	88.2	0.67	< 0.005	36.1	141
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.08	0.08	0.06	0.12	< 0.005	< 0.005	0.69	0.70	< 0.005	0.07	0.07	1.11	13.5	14.6	0.11	< 0.005	5.97	23.4

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.01	0.01	0.01	0.10	< 0.005	< 0.005	5.39	5.39	< 0.005	0.54	0.54	—	34.1	34.1	< 0.005	< 0.005	< 0.005	34.5

Area	0.33	0.33	< 0.005	0.43	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.79	1.79	< 0.005	< 0.005	—	1.79
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	6.68	0.00	6.68	0.67	0.00	—	23.4
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	36.1	36.1
Stationary	0.90	0.82	2.29	2.09	< 0.005	0.12	0.00	0.12	0.12	0.00	0.12	0.00	420	420	0.02	< 0.005	0.00	421
Total	1.24	1.15	2.31	2.63	< 0.005	0.12	5.39	5.51	0.12	0.54	0.66	6.68	456	462	0.69	< 0.005	36.1	517
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.01	0.01	0.01	0.07	< 0.005	< 0.005	5.39	5.39	< 0.005	0.54	0.54	—	30.1	30.1	< 0.005	< 0.005	< 0.005	30.5
Area	0.26	0.26	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	6.68	0.00	6.68	0.67	0.00	—	23.4
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	36.1	36.1
Stationary	0.90	0.82	2.29	2.09	< 0.005	0.12	0.00	0.12	0.12	0.00	0.12	0.00	420	420	0.02	< 0.005	0.00	421
Total	1.16	1.08	2.30	2.16	< 0.005	0.12	5.39	5.51	0.12	0.54	0.66	6.68	450	457	0.69	< 0.005	36.1	511
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	< 0.005	< 0.005	0.01	0.06	< 0.005	< 0.005	3.80	3.80	< 0.005	0.38	0.38	—	22.7	22.7	< 0.005	< 0.005	< 0.005	23.0
Area	0.31	0.31	< 0.005	0.32	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.32	1.32	< 0.005	< 0.005	—	1.33
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	6.68	0.00	6.68	0.67	0.00	—	23.4
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	36.1	36.1
Stationary	0.12	0.11	0.31	0.29	< 0.005	0.02	0.00	0.02	0.02	0.00	0.02	0.00	57.5	57.5	< 0.005	< 0.005	0.00	57.7
Total	0.44	0.43	0.32	0.66	< 0.005	0.02	3.80	3.82	0.02	0.38	0.40	6.68	81.5	88.2	0.67	< 0.005	36.1	141

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	0.69	0.69	< 0.005	0.07	0.07	—	3.75	3.75	< 0.005	< 0.005	< 0.005	3.80
Area	0.06	0.06	< 0.005	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.22	0.22	< 0.005	< 0.005	—	0.22
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	1.11	0.00	1.11	0.11	0.00	—	3.87
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.97	5.97
Stationary	0.02	0.02	0.06	0.05	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	9.52	9.52	< 0.005	< 0.005	0.00	9.55
Total	0.08	0.08	0.06	0.12	< 0.005	< 0.005	0.69	0.70	< 0.005	0.07	0.07	1.11	13.5	14.6	0.11	< 0.005	5.97	23.4

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Mobile source emissions results are presented in Sections 2.6. No further detailed breakdown of emissions is available.

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.22	0.22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.04	0.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.08	0.07	< 0.005	0.43	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.79	1.79	< 0.005	< 0.005	—	1.79
Total	0.33	0.33	< 0.005	0.43	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.79	1.79	< 0.005	< 0.005	—	1.79

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.22	0.22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.04	0.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.26	0.26	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.04	0.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.01	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.01	0.01	< 0.005	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.22	0.22	< 0.005	< 0.005	—	0.22
Total	0.06	0.06	< 0.005	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.22	0.22	< 0.005	< 0.005	—	0.22

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	6.68	0.00	6.68	0.67	0.00	—	23.4
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	6.68	0.00	6.68	0.67	0.00	—	23.4
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	6.68	0.00	6.68	0.67	0.00	—	23.4
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	6.68	0.00	6.68	0.67	0.00	—	23.4
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	1.11	0.00	1.11	0.11	0.00	—	3.87
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1.11	0.00	1.11	0.11	0.00	—	3.87

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	36.1	36.1
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	36.1	36.1
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	36.1	36.1
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	36.1	36.1
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.97	5.97
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.97	5.97

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.90	0.82	2.29	2.09	< 0.005	0.12	0.00	0.12	0.12	0.00	0.12	0.00	420	420	0.02	< 0.005	0.00	421
Total	0.90	0.82	2.29	2.09	< 0.005	0.12	0.00	0.12	0.12	0.00	0.12	0.00	420	420	0.02	< 0.005	0.00	421
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.90	0.82	2.29	2.09	< 0.005	0.12	0.00	0.12	0.12	0.00	0.12	0.00	420	420	0.02	< 0.005	0.00	421
Total	0.90	0.82	2.29	2.09	< 0.005	0.12	0.00	0.12	0.12	0.00	0.12	0.00	420	420	0.02	< 0.005	0.00	421
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.02	0.02	0.06	0.05	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	9.52	9.52	< 0.005	< 0.005	0.00	9.55
Total	0.02	0.02	0.06	0.05	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	9.52	9.52	< 0.005	< 0.005	0.00	9.55

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipm Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Total all Land Uses	2.00	0.00	0.00	521	48.0	0.00	0.00	12,514

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	15,000	5,000	1,200

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	270

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
General Heavy Industry	1,460,000	0.00	0.0000	0.0000	0.00
Parking Lot	17,520	0.00	0.0000	0.0000	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
General Heavy Industry	0.00	0.00
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
General Heavy Industry	12.4	—
Parking Lot	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
General Heavy Industry	User Defined	User Defined	23,900	22.7	0.05	0.05	30.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
Emergency Generator	Diesel	1.00	1.00	50.0	500	0.73

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type
—	—

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	32.8	annual days of extreme heat

Extreme Precipitation	0.00	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.19	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score

Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	11.6
AQ-PM	19.1
AQ-DPM	9.09
Drinking Water	30.6
Lead Risk Housing	50.8
Pesticides	90.5
Toxic Releases	7.58
Traffic	3.06

Effect Indicators	—
CleanUp Sites	74.2
Groundwater	77.9
Haz Waste Facilities/Generators	93.2
Impaired Water Bodies	100.0
Solid Waste	86.5
Sensitive Population	—
Asthma	87.6
Cardio-vascular	83.2
Low Birth Weights	26.9
Socioeconomic Factor Indicators	—
Education	82.7
Housing	51.4
Linguistic	88.8
Poverty	94.9
Unemployment	99.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	16.66880534
Employed	7.173104068
Median HI	5.299627871
Education	—
Bachelor's or higher	5.017323239
High school enrollment	16.8741178
Preschool enrollment	68.89516233

Transportation	—
Auto Access	18.40112922
Active commuting	51.10997049
Social	—
2-parent households	13.28114975
Voting	16.79712563
Neighborhood	—
Alcohol availability	70.25535737
Park access	33.85089183
Retail density	4.311561658
Supermarket access	49.58295907
Tree canopy	0.782753753
Housing	—
Homeownership	38.3036058
Housing habitability	30.96368536
Low-inc homeowner severe housing cost burden	26.76761196
Low-inc renter severe housing cost burden	52.89362248
Uncrowded housing	38.58591043
Health Outcomes	—
Insured adults	21.00603105
Arthritis	0.0
Asthma ER Admissions	30.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0

Life Expectancy at Birth	41.7
Cognitively Disabled	50.3
Physically Disabled	19.5
Heart Attack ER Admissions	46.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	54.3
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	14.1
Elderly	42.0
English Speaking	18.7
Foreign-born	65.3
Outdoor Workers	5.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	85.8
Traffic Density	4.9
Traffic Access	23.0
Other Indices	—
Hardship	92.9

Other Decision Support	—
2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	82.0
Healthy Places Index Score for Project Location (b)	11.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Operations: Landscape Equipment	Assumed 270 summer days for desert region.
Operations: Energy Use	Electricity consumption assumed to include system auxiliary energy consumption (2%), based on an assumed capacity of 50 MW system, operating 4 hours/day and 365 days/year.
Operations: Refrigerants	Assumed 500 pounds of SF6 as part of project operations for breakers/inverters.
Land Use	Land use data are based on applicant-provided buildout assumptions. 10,000 square feet of building space included for operation.

Operations: Emergency Generators and Fire Pumps	Assumed 1 back-up generator operating 1 hour/day and 50 hours/year as part of project operations.
Operations: Road Dust	All roads used by future developments projects within the Specific Plan Area would be required to be paved. Per ICAPCD guidance a value of 85% paved is assumed in the modeling to account for the high levels of entrained dust generated from vehicle travel on paved roadways in the region.
Characteristics: Utility Information	GHG intensity factors adjusted per RPS requirements.
Operations: Water and Waste Water	Applicant did not assign water demand to the 'floodways' land use designation. Any water demand for this land use is reflected in the 'solar' land use.

Lithium Valley Operation - Phase 3 - Green Hydrogen Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Lithium Valley Operation - Phase 3 - Green Hydrogen
Operational Year	2050
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	4.80
Location	33.18829759139308, -115.6026869228474
County	Imperial
City	Unincorporated
Air District	Imperial County APCD
Air Basin	Salton Sea
TAZ	5600
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
General Heavy Industry	2,080	1000sqft	1,691	2,079,813	415,963	—	—	—
Parking Lot	4,160	1000sqft	95.5	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	96.5	87.7	47.6	328	1.08	9.87	5,849	5,859	9.82	587	597	3,501	176,184	179,685	360	8.12	546	191,658
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	79.6	72.1	48.1	197	1.03	9.71	5,849	5,859	9.70	587	597	3,501	171,432	174,933	360	8.18	542	186,916
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	82.8	75.4	28.9	232	0.89	8.57	3,989	3,998	8.53	401	409	3,501	154,051	157,552	360	7.57	543	169,347
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	15.1	13.8	5.28	42.3	0.16	1.56	728	730	1.56	73.1	74.7	580	25,505	26,085	59.6	1.25	89.9	28,037

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	7.59	6.86	10.2	113	0.37	0.21	5,849	5,849	0.20	587	588	—	37,838	37,838	0.61	1.56	4.99	38,323

Area	69.3	68.1	0.76	90.5	0.01	0.16	—	0.16	0.12	—	0.12	—	372	372	0.02	< 0.005	—	373
Energy	2.00	1.00	18.1	15.2	0.11	1.38	—	1.38	1.38	—	1.38	—	21,653	21,653	1.92	0.04	—	21,713
Water	—	—	—	—	—	—	—	—	—	—	—	2,111	0.00	2,111	216	5.14	—	9,055
Waste	—	—	—	—	—	—	—	—	—	—	—	1,390	0.00	1,390	139	0.00	—	4,863
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	541	541
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	17.6	11.8	18.5	109	0.60	8.12	0.00	8.12	8.12	0.00	8.12	0.00	116,321	116,321	2.30	1.38	0.00	116,790
Total	96.5	87.7	47.6	328	1.08	9.87	5,849	5,859	9.82	587	597	3,501	176,184	179,685	360	8.12	546	191,658
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	6.73	6.04	11.5	72.4	0.33	0.21	5,849	5,849	0.20	587	588	—	33,458	33,458	0.61	1.61	0.13	33,954
Area	53.2	53.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	2.00	1.00	18.1	15.2	0.11	1.38	—	1.38	1.38	—	1.38	—	21,653	21,653	1.92	0.04	—	21,713
Water	—	—	—	—	—	—	—	—	—	—	—	2,111	0.00	2,111	216	5.14	—	9,055
Waste	—	—	—	—	—	—	—	—	—	—	—	1,390	0.00	1,390	139	0.00	—	4,863
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	541	541
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	17.6	11.8	18.5	109	0.60	8.12	0.00	8.12	8.12	0.00	8.12	0.00	116,321	116,321	2.30	1.38	0.00	116,790
Total	79.6	72.1	48.1	197	1.03	9.71	5,849	5,859	9.70	587	597	3,501	171,432	174,933	360	8.18	542	186,916
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	4.83	4.34	7.69	59.9	0.24	0.14	3,989	3,989	0.14	401	401	—	24,365	24,365	0.42	1.10	1.49	24,704
Area	65.2	64.2	0.56	66.9	< 0.005	0.12	—	0.12	0.09	—	0.09	—	275	275	0.01	< 0.005	—	276
Energy	2.00	1.00	18.1	15.2	0.11	1.38	—	1.38	1.38	—	1.38	—	21,653	21,653	1.92	0.04	—	21,713
Water	—	—	—	—	—	—	—	—	—	—	—	2,111	0.00	2,111	216	5.14	—	9,055
Waste	—	—	—	—	—	—	—	—	—	—	—	1,390	0.00	1,390	139	0.00	—	4,863

Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	541	541
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	10.8	5.82	2.53	89.9	0.54	6.93	0.00	6.93	6.93	0.00	6.93	0.00	107,759	107,759	2.08	1.29	0.00	108,195
Total	82.8	75.4	28.9	232	0.89	8.57	3,989	3,998	8.53	401	409	3,501	154,051	157,552	360	7.57	543	169,347
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.88	0.79	1.40	10.9	0.04	0.03	728	728	0.02	73.1	73.1	—	4,034	4,034	0.07	0.18	0.25	4,090
Area	11.9	11.7	0.10	12.2	< 0.005	0.02	—	0.02	0.02	—	0.02	—	45.6	45.6	< 0.005	< 0.005	—	45.7
Energy	0.36	0.18	3.31	2.78	0.02	0.25	—	0.25	0.25	—	0.25	—	3,585	3,585	0.32	0.01	—	3,595
Water	—	—	—	—	—	—	—	—	—	—	—	349	0.00	349	35.8	0.85	—	1,499
Waste	—	—	—	—	—	—	—	—	—	—	—	230	0.00	230	23.0	0.00	—	805
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	89.6	89.6
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	1.98	1.06	0.46	16.4	0.10	1.26	0.00	1.26	1.26	0.00	1.26	0.00	17,841	17,841	0.34	0.21	0.00	17,913
Total	15.1	13.8	5.28	42.3	0.16	1.56	728	730	1.56	73.1	74.7	580	25,505	26,085	59.6	1.25	89.9	28,037

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	7.59	6.86	10.2	113	0.37	0.21	5,849	5,849	0.20	587	588	—	37,838	37,838	0.61	1.56	4.99	38,323
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	7.59	6.86	10.2	113	0.37	0.21	5,849	5,849	0.20	587	588	—	37,838	37,838	0.61	1.56	4.99	38,323
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	6.73	6.04	11.5	72.4	0.33	0.21	5,849	5,849	0.20	587	588	—	33,458	33,458	0.61	1.61	0.13	33,954
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	6.73	6.04	11.5	72.4	0.33	0.21	5,849	5,849	0.20	587	588	—	33,458	33,458	0.61	1.61	0.13	33,954
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.88	0.79	1.40	10.9	0.04	0.03	728	728	0.02	73.1	73.1	—	4,034	4,034	0.07	0.18	0.25	4,090
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.88	0.79	1.40	10.9	0.04	0.03	728	728	0.02	73.1	73.1	—	4,034	4,034	0.07	0.18	0.25	4,090

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
undefined	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
undefined	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
undefined	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	2.00	1.00	18.1	15.2	0.11	1.38	—	1.38	1.38	—	1.38	—	21,653	21,653	1.92	0.04	—	21,713
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	2.00	1.00	18.1	15.2	0.11	1.38	—	1.38	1.38	—	1.38	—	21,653	21,653	1.92	0.04	—	21,713
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	2.00	1.00	18.1	15.2	0.11	1.38	—	1.38	1.38	—	1.38	—	21,653	21,653	1.92	0.04	—	21,713
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	2.00	1.00	18.1	15.2	0.11	1.38	—	1.38	1.38	—	1.38	—	21,653	21,653	1.92	0.04	—	21,713
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.36	0.18	3.31	2.78	0.02	0.25	—	0.25	0.25	—	0.25	—	3,585	3,585	0.32	0.01	—	3,595
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.36	0.18	3.31	2.78	0.02	0.25	—	0.25	0.25	—	0.25	—	3,585	3,585	0.32	0.01	—	3,595

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Consum Products	44.8	44.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	8.40	8.40	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	16.1	14.9	0.76	90.5	0.01	0.16	—	0.16	0.12	—	0.12	—	372	372	0.02	< 0.005	—	373
Total	69.3	68.1	0.76	90.5	0.01	0.16	—	0.16	0.12	—	0.12	—	372	372	0.02	< 0.005	—	373
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	44.8	44.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	8.40	8.40	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	53.2	53.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	8.18	8.18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	1.53	1.53	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	2.17	2.01	0.10	12.2	< 0.005	0.02	—	0.02	0.02	—	0.02	—	45.6	45.6	< 0.005	< 0.005	—	45.7
Total	11.9	11.7	0.10	12.2	< 0.005	0.02	—	0.02	0.02	—	0.02	—	45.6	45.6	< 0.005	< 0.005	—	45.7

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	2,111	0.00	2,111	216	5.14	—	9,055
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	2,111	0.00	2,111	216	5.14	—	9,055
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	2,111	0.00	2,111	216	5.14	—	9,055
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	2,111	0.00	2,111	216	5.14	—	9,055
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	349	0.00	349	35.8	0.85	—	1,499
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	349	0.00	349	35.8	0.85	—	1,499

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	1,390	0.00	1,390	139	0.00	—	4,863
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1,390	0.00	1,390	139	0.00	—	4,863
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	1,390	0.00	1,390	139	0.00	—	4,863
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1,390	0.00	1,390	139	0.00	—	4,863
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	230	0.00	230	23.0	0.00	—	805
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	230	0.00	230	23.0	0.00	—	805

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	541	541
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	541	541
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	541	541
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	541	541
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	89.6	89.6
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	89.6	89.6

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Aerial Lifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Skid Steer Loaders	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Aerial Lifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Skid Steer Loaders	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Aerial Lifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Skid Steer Loaders	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Emergency	4.84	4.40	12.3	11.2	0.02	0.65	0.00	0.65	0.65	0.00	0.65	0.00	2,253	2,253	0.09	0.02	0.00	2,261
Fire Pump	2.42	2.20	6.15	5.61	0.01	0.32	0.00	0.32	0.32	0.00	0.32	0.00	1,125	1,125	0.05	0.01	0.00	1,129
Process Boiler	10.4	5.18	0.00	92.2	0.56	7.15	0.00	7.15	7.15	0.00	7.15	0.00	112,943	112,943	2.16	1.35	0.00	113,401
Total	17.6	11.8	18.5	109	0.60	8.12	0.00	8.12	8.12	0.00	8.12	0.00	116,321	116,321	2.30	1.38	0.00	116,790
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	4.84	4.40	12.3	11.2	0.02	0.65	0.00	0.65	0.65	0.00	0.65	0.00	2,253	2,253	0.09	0.02	0.00	2,261
Fire Pump	2.42	2.20	6.15	5.61	0.01	0.32	0.00	0.32	0.32	0.00	0.32	0.00	1,125	1,125	0.05	0.01	0.00	1,129
Process Boiler	10.4	5.18	0.00	92.2	0.56	7.15	0.00	7.15	7.15	0.00	7.15	0.00	112,943	112,943	2.16	1.35	0.00	113,401
Total	17.6	11.8	18.5	109	0.60	8.12	0.00	8.12	8.12	0.00	8.12	0.00	116,321	116,321	2.30	1.38	0.00	116,790
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.12	0.11	0.31	0.28	< 0.005	0.02	0.00	0.02	0.02	0.00	0.02	0.00	51.1	51.1	< 0.005	< 0.005	0.00	51.3
Fire Pump	0.06	0.05	0.15	0.14	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	25.5	25.5	< 0.005	< 0.005	0.00	25.6
Process Boiler	1.79	0.90	0.00	16.0	0.10	1.24	0.00	1.24	1.24	0.00	1.24	0.00	17,764	17,764	0.34	0.21	0.00	17,836
Total	1.98	1.06	0.46	16.4	0.10	1.26	0.00	1.26	1.26	0.00	1.26	0.00	17,841	17,841	0.34	0.21	0.00	17,913

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipm Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
General Heavy Industry	1,560	2,558	2,017	645,262	31,772	52,107	41,092	13,143,178
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	3,119,720	1,039,907	249,578

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	270

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
General Heavy Industry	63,173,126	0.00	0.0000	0.0000	67,561,900
Parking Lot	3,643,832	0.00	0.0000	0.0000	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
General Heavy Industry	1,101,625,914	19,502,843
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
General Heavy Industry	2,579	—
Parking Lot	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
General Heavy Industry	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Aerial Lifts	Electric	Average	3.00	1.00	63.0	0.31
Skid Steer Loaders	Electric	Average	3.00	1.00	71.0	0.37

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
Emergency Generator	Diesel	4.00	1.00	50.0	671	0.73
Fire Pump	Diesel	4.00	1.00	50.0	335	0.73

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)
Boiler - CNG (5–75 MMBTU)	CNG	4.00	10.0	240	83,220

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	32.8	annual days of extreme heat
Extreme Precipitation	0.00	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.19	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	11.6
AQ-PM	19.1
AQ-DPM	9.09
Drinking Water	30.6

Lead Risk Housing	50.8
Pesticides	90.5
Toxic Releases	7.58
Traffic	3.06
Effect Indicators	—
CleanUp Sites	74.2
Groundwater	77.9
Haz Waste Facilities/Generators	93.2
Impaired Water Bodies	100.0
Solid Waste	86.5
Sensitive Population	—
Asthma	87.6
Cardio-vascular	83.2
Low Birth Weights	26.9
Socioeconomic Factor Indicators	—
Education	82.7
Housing	51.4
Linguistic	88.8
Poverty	94.9
Unemployment	99.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	16.66880534
Employed	7.173104068
Median HI	5.299627871

Education	—
Bachelor's or higher	5.017323239
High school enrollment	16.8741178
Preschool enrollment	68.89516233
Transportation	—
Auto Access	18.40112922
Active commuting	51.10997049
Social	—
2-parent households	13.28114975
Voting	16.79712563
Neighborhood	—
Alcohol availability	70.25535737
Park access	33.85089183
Retail density	4.311561658
Supermarket access	49.58295907
Tree canopy	0.782753753
Housing	—
Homeownership	38.3036058
Housing habitability	30.96368536
Low-inc homeowner severe housing cost burden	26.76761196
Low-inc renter severe housing cost burden	52.89362248
Uncrowded housing	38.58591043
Health Outcomes	—
Insured adults	21.00603105
Arthritis	0.0
Asthma ER Admissions	30.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0

Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	41.7
Cognitively Disabled	50.3
Physically Disabled	19.5
Heart Attack ER Admissions	46.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	54.3
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	14.1
Elderly	42.0
English Speaking	18.7
Foreign-born	65.3
Outdoor Workers	5.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	85.8

Traffic Density	4.9
Traffic Access	23.0
Other Indices	—
Hardship	92.9
Other Decision Support	—
2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	82.0
Healthy Places Index Score for Project Location (b)	11.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Land use data are based on applicant-provided buildout assumptions.
Operations: Vehicle Data	Custom trip rates are provided by the applicant.

Operations: Landscape Equipment	Assumed 270 summer days for desert region.
Operations: Off-Road Equipment	Assumed 3 aerial lifts and 3 skid steer loaders each operating 1 hour per day as part of project operations.
Operations: Emergency Generators and Fire Pumps	Assumed 4 back-up generators and 4 fire pumps operating 1 hour/day and 50 hours/year for maintenance and testing.
Operations: Road Dust	All roads used by future developments projects within the Specific Plan Area would be required to be paved. Per ICAPCD guidance a value of 85% paved is assumed in the modeling to account for the high levels of entrained dust generated from vehicle travel on paved roadways in the region.
Operations: Water and Waste Water	Water data are based on applicant-provided calculations for the land use.
Characteristics: Utility Information	GHG intensity factors adjusted per RPS requirements.

Lithium Valley Operation - Phase 3 - Housing Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Lithium Valley Operation - Phase 3 - Housing
Operational Year	2050
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	4.80
Location	33.18829759139308, -115.6026869228474
County	Imperial
City	Unincorporated
Air District	Imperial County APCD
Air Basin	Salton Sea
TAZ	5600
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Condo/Townhouse	278	Dwelling Unit	66.2	136,768	27,354	—	990	—
Parking Lot	274	1000sqft	6.28	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	10.5	9.95	6.98	87.9	0.23	0.14	3,629	3,629	0.13	364	365	141	23,615	23,756	14.6	1.07	4.08	24,445
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	8.38	7.93	7.63	47.1	0.20	0.13	3,629	3,629	0.12	364	365	141	20,856	20,998	14.6	1.10	1.06	21,694
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	9.10	8.64	6.72	61.6	0.19	0.12	3,206	3,207	0.11	322	322	141	19,700	19,842	14.6	0.98	2.18	20,502
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.66	1.58	1.23	11.2	0.04	0.02	585	585	0.02	58.8	58.8	23.4	3,262	3,285	2.41	0.16	0.36	3,394

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	5.59	5.13	6.83	72.1	0.23	0.13	3,629	3,629	0.12	364	365	—	23,573	23,573	0.41	1.00	3.10	23,883

Area	4.90	4.82	0.15	15.9	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	42.2	42.2	< 0.005	< 0.005	—	42.3
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	30.6	0.00	30.6	3.14	0.07	—	131
Waste	—	—	—	—	—	—	—	—	—	—	—	111	0.00	111	11.1	0.00	—	388
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.98	0.98
Total	10.5	9.95	6.98	87.9	0.23	0.14	3,629	3,629	0.13	364	365	141	23,615	23,756	14.6	1.07	4.08	24,445
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	4.93	4.48	7.63	47.1	0.20	0.13	3,629	3,629	0.12	364	365	—	20,856	20,856	0.42	1.03	0.08	21,174
Area	3.45	3.45	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	30.6	0.00	30.6	3.14	0.07	—	131
Waste	—	—	—	—	—	—	—	—	—	—	—	111	0.00	111	11.1	0.00	—	388
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.98	0.98
Total	8.38	7.93	7.63	47.1	0.20	0.13	3,629	3,629	0.12	364	365	141	20,856	20,998	14.6	1.10	1.06	21,694
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	4.58	4.18	6.61	49.8	0.19	0.12	3,206	3,207	0.11	322	322	—	19,669	19,669	0.37	0.91	1.20	19,950
Area	4.52	4.46	0.11	11.7	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	0.00	31.2	31.2	< 0.005	< 0.005	—	31.3
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	30.6	0.00	30.6	3.14	0.07	—	131
Waste	—	—	—	—	—	—	—	—	—	—	—	111	0.00	111	11.1	0.00	—	388
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.98	0.98
Total	9.10	8.64	6.72	61.6	0.19	0.12	3,206	3,207	0.11	322	322	141	19,700	19,842	14.6	0.98	2.18	20,502
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.84	0.76	1.21	9.09	0.04	0.02	585	585	0.02	58.8	58.8	—	3,256	3,256	0.06	0.15	0.20	3,303
Area	0.82	0.81	0.02	2.14	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	5.16	5.16	< 0.005	< 0.005	—	5.18
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Water	—	—	—	—	—	—	—	—	—	—	—	5.06	0.00	5.06	0.52	0.01	—	21.7
Waste	—	—	—	—	—	—	—	—	—	—	—	18.3	0.00	18.3	1.83	0.00	—	64.2
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.16	0.16
Total	1.66	1.58	1.23	11.2	0.04	0.02	585	585	0.02	58.8	58.8	23.4	3,262	3,285	2.41	0.16	0.36	3,394

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	5.59	5.13	6.83	72.1	0.23	0.13	3,629	3,629	0.12	364	365	—	23,573	23,573	0.41	1.00	3.10	23,883
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	5.59	5.13	6.83	72.1	0.23	0.13	3,629	3,629	0.12	364	365	—	23,573	23,573	0.41	1.00	3.10	23,883
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	4.93	4.48	7.63	47.1	0.20	0.13	3,629	3,629	0.12	364	365	—	20,856	20,856	0.42	1.03	0.08	21,174
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	4.93	4.48	7.63	47.1	0.20	0.13	3,629	3,629	0.12	364	365	—	20,856	20,856	0.42	1.03	0.08	21,174
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Condo/T	0.84	0.76	1.21	9.09	0.04	0.02	585	585	0.02	58.8	58.8	—	3,256	3,256	0.06	0.15	0.20	3,303
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.84	0.76	1.21	9.09	0.04	0.02	585	585	0.02	58.8	58.8	—	3,256	3,256	0.06	0.15	0.20	3,303

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	2.95	2.95	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.50	0.50	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	1.45	1.37	0.15	15.9	< 0.005	0.01	—	0.01	0.01	—	0.01	—	42.2	42.2	< 0.005	< 0.005	—	42.3
Total	4.90	4.82	0.15	15.9	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	42.2	42.2	< 0.005	< 0.005	—	42.3
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	2.95	2.95	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.50	0.50	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	3.45	3.45	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	0.54	0.54	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.09	0.09	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.20	0.18	0.02	2.14	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.16	5.16	< 0.005	< 0.005	—	5.18
Total	0.82	0.81	0.02	2.14	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	5.16	5.16	< 0.005	< 0.005	—	5.18

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	30.6	0.00	30.6	3.14	0.07	—	131
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	30.6	0.00	30.6	3.14	0.07	—	131
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Condo/Townhou	—	—	—	—	—	—	—	—	—	—	—	30.6	0.00	30.6	3.14	0.07	—	131
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	30.6	0.00	30.6	3.14	0.07	—	131
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	5.06	0.00	5.06	0.52	0.01	—	21.7
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	5.06	0.00	5.06	0.52	0.01	—	21.7

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	111	0.00	111	11.1	0.00	—	388
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	111	0.00	111	11.1	0.00	—	388
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	111	0.00	111	11.1	0.00	—	388

Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	111	0.00	111	11.1	0.00	—	388
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	18.3	0.00	18.3	1.83	0.00	—	64.2
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	18.3	0.00	18.3	1.83	0.00	—	64.2

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.98	0.98
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.98	0.98
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.98	0.98
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.98	0.98
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.16	0.16
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.16	0.16

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Condo/Townhouse	1,857	2,066	1,593	674,920	29,067	32,331	24,933	10,564,148
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Condo/Townhouse	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	125
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
276954.9975	92,318	0.00	0.00	16,412

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	270

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Condo/Townhouse	3,736,278	0.00	0.0000	0.0000	0.00
Parking Lot	239,621	0.00	0.0000	0.0000	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Condo/Townhouse	15,960,107	876,414
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)

Condo/Townhouse	206	—
Parking Lot	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Condo/Townhouse	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Condo/Townhouse	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	32.8	annual days of extreme heat
Extreme Precipitation	0.00	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.19	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A

Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	11.6
AQ-PM	19.1
AQ-DPM	9.09
Drinking Water	30.6
Lead Risk Housing	50.8
Pesticides	90.5
Toxic Releases	7.58
Traffic	3.06
Effect Indicators	—
CleanUp Sites	74.2
Groundwater	77.9

Haz Waste Facilities/Generators	93.2
Impaired Water Bodies	100.0
Solid Waste	86.5
Sensitive Population	—
Asthma	87.6
Cardio-vascular	83.2
Low Birth Weights	26.9
Socioeconomic Factor Indicators	—
Education	82.7
Housing	51.4
Linguistic	88.8
Poverty	94.9
Unemployment	99.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	16.66880534
Employed	7.173104068
Median HI	5.299627871
Education	—
Bachelor's or higher	5.017323239
High school enrollment	16.8741178
Preschool enrollment	68.89516233
Transportation	—
Auto Access	18.40112922
Active commuting	51.10997049

Social	—
2-parent households	13.28114975
Voting	16.79712563
Neighborhood	—
Alcohol availability	70.25535737
Park access	33.85089183
Retail density	4.311561658
Supermarket access	49.58295907
Tree canopy	0.782753753
Housing	—
Homeownership	38.3036058
Housing habitability	30.96368536
Low-inc homeowner severe housing cost burden	26.76761196
Low-inc renter severe housing cost burden	52.89362248
Uncrowded housing	38.58591043
Health Outcomes	—
Insured adults	21.00603105
Arthritis	0.0
Asthma ER Admissions	30.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	41.7
Cognitively Disabled	50.3
Physically Disabled	19.5

Heart Attack ER Admissions	46.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	54.3
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	14.1
Elderly	42.0
English Speaking	18.7
Foreign-born	65.3
Outdoor Workers	5.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	85.8
Traffic Density	4.9
Traffic Access	23.0
Other Indices	—
Hardship	92.9
Other Decision Support	—
2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	82.0
Healthy Places Index Score for Project Location (b)	11.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Land use data are based on applicant-provided buildout assumptions.
Operations: Vehicle Data	Trip rates are based on ITE Land Use Code 220.
Operations: Road Dust	All roads used by future developments projects within the Specific Plan Area would be required to be paved. Per ICAPCD guidance a value of 85% paved is assumed in the modeling to account for the high levels of entrained dust generated from vehicle travel on paved roadways in the region.
Operations: Hearths	Residences would not be assumed to include fireplaces of any kind.
Operations: Landscape Equipment	Assumed 270 summer days for desert region.
Operations: Water and Waste Water	Water data are based on applicant-provided calculations for the land use.

Operations: Energy Use	Land use is not anticipated to incorporate the use of natural gas. Default natural gas consumption was converted to electricity.
Characteristics: Utility Information	GHG intensity factors adjusted per RPS requirements.

Lithium Valley Operation - Phase 3 - Intermodal Rail Hub Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Lithium Valley Operation - Phase 3 - Intermodal Rail Hub
Operational Year	2050
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	4.80
Location	33.18829759139308, -115.6026869228474
County	Imperial
City	Unincorporated
Air District	Imperial County APCD
Air Basin	Salton Sea
TAZ	5600
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Unrefrigerated Warehouse-Rail	1,854	1000sqft	883	1,854,390	927,193	—	—	—
Parking Lot	9,272	1000sqft	213	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	74.4	71.7	27.5	210	0.45	1.44	5,936	5,937	1.39	596	597	1,031	51,334	52,365	105	1.84	5.07	55,540
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	59.1	57.7	28.0	87.7	0.40	1.29	5,936	5,937	1.28	596	597	1,031	46,557	47,588	105	1.89	0.13	50,773
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	67.7	65.6	22.2	156	0.41	1.09	5,858	5,859	1.05	588	589	1,031	47,542	48,572	105	1.86	2.19	51,750
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	12.3	12.0	4.06	28.6	0.08	0.20	1,069	1,069	0.19	107	108	171	7,871	8,042	17.4	0.31	0.36	8,568

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	7.70	6.97	10.4	115	0.38	0.21	5,936	5,936	0.20	596	596	—	38,400	38,400	0.62	1.58	5.07	38,892

Area	62.9	61.8	0.68	80.7	< 0.005	0.14	—	0.14	0.11	—	0.11	—	332	332	0.01	< 0.005	—	333
Energy	1.05	0.52	9.51	7.99	0.06	0.72	—	0.72	0.72	—	0.72	—	11,343	11,343	1.00	0.02	—	11,375
Water	—	—	—	—	—	—	—	—	—	—	—	91.1	0.00	91.1	9.34	0.22	—	391
Waste	—	—	—	—	—	—	—	—	—	—	—	939	0.00	939	93.9	0.00	—	3,287
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	2.70	2.46	6.88	6.28	0.01	0.36	0.00	0.36	0.36	0.00	0.36	0.00	1,259	1,259	0.05	0.01	0.00	1,263
Total	74.4	71.7	27.5	210	0.45	1.44	5,936	5,937	1.39	596	597	1,031	51,334	52,365	105	1.84	5.07	55,540
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	6.83	6.13	11.6	73.5	0.33	0.21	5,936	5,936	0.20	596	596	—	33,955	33,955	0.62	1.63	0.13	34,458
Area	48.5	48.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	1.05	0.52	9.51	7.99	0.06	0.72	—	0.72	0.72	—	0.72	—	11,343	11,343	1.00	0.02	—	11,375
Water	—	—	—	—	—	—	—	—	—	—	—	91.1	0.00	91.1	9.34	0.22	—	391
Waste	—	—	—	—	—	—	—	—	—	—	—	939	0.00	939	93.9	0.00	—	3,287
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	2.70	2.46	6.88	6.28	0.01	0.36	0.00	0.36	0.36	0.00	0.36	0.00	1,259	1,259	0.05	0.01	0.00	1,263
Total	59.1	57.7	28.0	87.7	0.40	1.29	5,936	5,937	1.28	596	597	1,031	46,557	47,588	105	1.89	0.13	50,773
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	7.09	6.37	11.3	87.9	0.35	0.21	5,858	5,859	0.20	588	589	—	35,781	35,781	0.62	1.61	2.19	36,279
Area	59.2	58.3	0.50	59.7	< 0.005	0.11	—	0.11	0.08	—	0.08	—	245	245	0.01	< 0.005	—	246
Energy	1.05	0.52	9.51	7.99	0.06	0.72	—	0.72	0.72	—	0.72	—	11,343	11,343	1.00	0.02	—	11,375
Water	—	—	—	—	—	—	—	—	—	—	—	91.1	0.00	91.1	9.34	0.22	—	391
Waste	—	—	—	—	—	—	—	—	—	—	—	939	0.00	939	93.9	0.00	—	3,287
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Stationa	0.37	0.34	0.94	0.86	< 0.005	0.05	0.00	0.05	0.05	0.00	0.05	0.00	173	173	0.01	< 0.005	0.00	173
Total	67.7	65.6	22.2	156	0.41	1.09	5,858	5,859	1.05	588	589	1,031	47,542	48,572	105	1.86	2.19	51,750
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.29	1.16	2.06	16.0	0.06	0.04	1,069	1,069	0.04	107	107	—	5,924	5,924	0.10	0.27	0.36	6,006
Area	10.8	10.6	0.09	10.9	< 0.005	0.02	—	0.02	0.01	—	0.01	—	40.6	40.6	< 0.005	< 0.005	—	40.8
Energy	0.19	0.10	1.73	1.46	0.01	0.13	—	0.13	0.13	—	0.13	—	1,878	1,878	0.17	< 0.005	—	1,883
Water	—	—	—	—	—	—	—	—	—	—	—	15.1	0.00	15.1	1.55	0.04	—	64.7
Waste	—	—	—	—	—	—	—	—	—	—	—	156	0.00	156	15.5	0.00	—	544
Off-Roa d	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationa ry	0.07	0.06	0.17	0.16	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	28.6	28.6	< 0.005	< 0.005	0.00	28.7
Total	12.3	12.0	4.06	28.6	0.08	0.20	1,069	1,069	0.19	107	108	171	7,871	8,042	17.4	0.31	0.36	8,568

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrig erated Wareho use-Rail	7.70	6.97	10.4	115	0.38	0.21	5,936	5,936	0.20	596	596	—	38,400	38,400	0.62	1.58	5.07	38,892
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	7.70	6.97	10.4	115	0.38	0.21	5,936	5,936	0.20	596	596	—	38,400	38,400	0.62	1.58	5.07	38,892

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-Rail	6.83	6.13	11.6	73.5	0.33	0.21	5,936	5,936	0.20	596	596	—	33,955	33,955	0.62	1.63	0.13	34,458
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	6.83	6.13	11.6	73.5	0.33	0.21	5,936	5,936	0.20	596	596	—	33,955	33,955	0.62	1.63	0.13	34,458
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-Rail	1.29	1.16	2.06	16.0	0.06	0.04	1,069	1,069	0.04	107	107	—	5,924	5,924	0.10	0.27	0.36	6,006
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	1.29	1.16	2.06	16.0	0.06	0.04	1,069	1,069	0.04	107	107	—	5,924	5,924	0.10	0.27	0.36	6,006

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

undefined	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
undefined	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
undefined	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unrefrigerated	1.05	0.52	9.51	7.99	0.06	0.72	—	0.72	0.72	—	0.72	—	11,343	11,343	1.00	0.02	—	11,375
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	1.05	0.52	9.51	7.99	0.06	0.72	—	0.72	0.72	—	0.72	—	11,343	11,343	1.00	0.02	—	11,375
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-Rail	1.05	0.52	9.51	7.99	0.06	0.72	—	0.72	0.72	—	0.72	—	11,343	11,343	1.00	0.02	—	11,375
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	1.05	0.52	9.51	7.99	0.06	0.72	—	0.72	0.72	—	0.72	—	11,343	11,343	1.00	0.02	—	11,375
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-Rail	0.19	0.10	1.73	1.46	0.01	0.13	—	0.13	0.13	—	0.13	—	1,878	1,878	0.17	< 0.005	—	1,883
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.19	0.10	1.73	1.46	0.01	0.13	—	0.13	0.13	—	0.13	—	1,878	1,878	0.17	< 0.005	—	1,883

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Consumer Product	40.4	40.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	8.13	8.13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	14.4	13.3	0.68	80.7	< 0.005	0.14	—	0.14	0.11	—	0.11	—	332	332	0.01	< 0.005	—	333
Total	62.9	61.8	0.68	80.7	< 0.005	0.14	—	0.14	0.11	—	0.11	—	332	332	0.01	< 0.005	—	333
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	40.4	40.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	8.13	8.13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	48.5	48.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	7.38	7.38	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	1.48	1.48	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	1.94	1.79	0.09	10.9	< 0.005	0.02	—	0.02	0.01	—	0.01	—	40.6	40.6	< 0.005	< 0.005	—	40.8
Total	10.8	10.6	0.09	10.9	< 0.005	0.02	—	0.02	0.01	—	0.01	—	40.6	40.6	< 0.005	< 0.005	—	40.8

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	91.1	0.00	91.1	9.34	0.22	—	391
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	91.1	0.00	91.1	9.34	0.22	—	391
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	91.1	0.00	91.1	9.34	0.22	—	391
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	91.1	0.00	91.1	9.34	0.22	—	391
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	15.1	0.00	15.1	1.55	0.04	—	64.7
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	15.1	0.00	15.1	1.55	0.04	—	64.7

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	939	0.00	939	93.9	0.00	—	3,287
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	939	0.00	939	93.9	0.00	—	3,287
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	939	0.00	939	93.9	0.00	—	3,287
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	939	0.00	939	93.9	0.00	—	3,287
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	156	0.00	156	15.5	0.00	—	544
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	156	0.00	156	15.5	0.00	—	544

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Welders	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Air Compressors	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Construction Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Rough Terrain Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Material Handling Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Crawler Tractors	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Generator Sets	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Sweepers/Scrubbers	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Cranes	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Tractors/Loaders/Backhoes	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other General Industrial Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Welders	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Air Compressors	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Construction Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Rough Terrain Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Material Handling Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Crawler Tractors	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Generator Sets	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Sweepers/Scrubbers	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Cranes	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Tractors/Loaders/Backhoes	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other General Industrial Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Welders	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Air Compressors	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Construction Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Rough Terrain Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Other Material Handling Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Crawler Tractors	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Generator Sets	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Sweepers/Scrubbers	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Cranes	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Tractors/Loaders/Backhoes	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other General Industrial Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Emergency Generator	2.70	2.46	6.88	6.28	0.01	0.36	0.00	0.36	0.36	0.00	0.36	0.00	1,259	1,259	0.05	0.01	0.00	1,263
Total	2.70	2.46	6.88	6.28	0.01	0.36	0.00	0.36	0.36	0.00	0.36	0.00	1,259	1,259	0.05	0.01	0.00	1,263
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	2.70	2.46	6.88	6.28	0.01	0.36	0.00	0.36	0.36	0.00	0.36	0.00	1,259	1,259	0.05	0.01	0.00	1,263
Total	2.70	2.46	6.88	6.28	0.01	0.36	0.00	0.36	0.36	0.00	0.36	0.00	1,259	1,259	0.05	0.01	0.00	1,263
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.07	0.06	0.17	0.16	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	28.6	28.6	< 0.005	< 0.005	0.00	28.7
Total	0.07	0.06	0.17	0.16	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	28.6	28.6	< 0.005	< 0.005	0.00	28.7

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Unrefrigerated Warehouse-Rail	2,596	2,596	2,596	947,593	52,880	52,880	52,880	19,301,290
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	2,781,585	927,195	556,305

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	270

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Unrefrigerated Warehouse-Rail	20,795,898	0.00	0.0000	0.0000	35,393,426
Parking Lot	8,122,049	0.00	0.0000	0.0000	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Unrefrigerated Warehouse-Rail	47,528,544	2,103,572
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Unrefrigerated Warehouse-Rail	1,743	—
Parking Lot	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Welders	Electric	Average	3.00	8.00	46.0	0.45
Air Compressors	Electric	Average	3.00	8.00	37.0	0.48
Other Construction Equipment	Electric	Average	3.00	8.00	160	0.43
Forklifts	Electric	Average	206	8.00	200	0.20
Rough Terrain Forklifts	Electric	Average	6.00	8.00	200	0.40
Other Material Handling Equipment	Electric	Average	3.00	8.00	136	0.59
Crawler Tractors	Electric	Average	3.00	8.00	250	0.39
Generator Sets	Electric	Average	3.00	8.00	200	0.74
Sweepers/Scrubbers	Electric	Average	3.00	8.00	60.0	0.68
Cranes	Electric	Average	3.00	8.00	367	0.29
Tractors/Loaders/Backhoes	Electric	Average	3.00	8.00	158	0.55
Other General Industrial Equipment	Electric	Average	3.00	8.00	35.0	0.34

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
Emergency Generator	Diesel	3.00	1.00	50.0	500	0.73

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	32.8	annual days of extreme heat
Extreme Precipitation	0.00	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.19	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	11.6
AQ-PM	19.1

AQ-DPM	9.09
Drinking Water	30.6
Lead Risk Housing	50.8
Pesticides	90.5
Toxic Releases	7.58
Traffic	3.06
Effect Indicators	—
CleanUp Sites	74.2
Groundwater	77.9
Haz Waste Facilities/Generators	93.2
Impaired Water Bodies	100.0
Solid Waste	86.5
Sensitive Population	—
Asthma	87.6
Cardio-vascular	83.2
Low Birth Weights	26.9
Socioeconomic Factor Indicators	—
Education	82.7
Housing	51.4
Linguistic	88.8
Poverty	94.9
Unemployment	99.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	16.66880534

Employed	7.173104068
Median HI	5.299627871
Education	—
Bachelor's or higher	5.017323239
High school enrollment	16.8741178
Preschool enrollment	68.89516233
Transportation	—
Auto Access	18.40112922
Active commuting	51.10997049
Social	—
2-parent households	13.28114975
Voting	16.79712563
Neighborhood	—
Alcohol availability	70.25535737
Park access	33.85089183
Retail density	4.311561658
Supermarket access	49.58295907
Tree canopy	0.782753753
Housing	—
Homeownership	38.3036058
Housing habitability	30.96368536
Low-inc homeowner severe housing cost burden	26.76761196
Low-inc renter severe housing cost burden	52.89362248
Uncrowded housing	38.58591043
Health Outcomes	—
Insured adults	21.00603105
Arthritis	0.0
Asthma ER Admissions	30.1

High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	41.7
Cognitively Disabled	50.3
Physically Disabled	19.5
Heart Attack ER Admissions	46.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	54.3
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	14.1
Elderly	42.0
English Speaking	18.7
Foreign-born	65.3
Outdoor Workers	5.4

Climate Change Adaptive Capacity	—
Impervious Surface Cover	85.8
Traffic Density	4.9
Traffic Access	23.0
Other Indices	—
Hardship	92.9
Other Decision Support	—
2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	82.0
Healthy Places Index Score for Project Location (b)	11.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification

Land Use	Land use data are based on applicant-provided buildout assumptions.
Operations: Vehicle Data	Trip rates are based on ITE Land Use Code 154.
Operations: Landscape Equipment	Assumed 270 summer days for desert region.
Operations: Road Dust	All roads used by future developments projects within the Specific Plan Area would be required to be paved. Per ICAPCD guidance a value of 85% paved is assumed in the modeling to account for the high levels of entrained dust generated from vehicle travel on paved roadways in the region
Operations: Off-Road Equipment	other construction equipment = rail car wheel change machine rough terrain forklifts = yard trucks other material handling equipment = side pick crawler tractors = yard tractors
Operations: Water and Waste Water	Water data are based on applicant-provided calculations for the land use
Characteristics: Utility Information	GHG intensity factors adjusted per RPS requirements.
Operations: Emergency Generators and Fire Pumps	Assumed 3 back-up generators each operating 1 hour/day and 50 hours/year for maintenance and testing.

Lithium Valley Operation - Phase 3 - Logistics and Warehousing Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Lithium Valley Operation - Phase 3 - Logistics and Warehousing
Operational Year	2050
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	4.80
Location	33.18829759139308, -115.6026869228474
County	Imperial
City	Unincorporated
Air District	Imperial County APCD
Air Basin	Salton Sea
TAZ	5600
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Unrefrigerated Warehouse-No Rail	1,524	1000sqft	725	1,523,687	761,844	—	—	—

Unrefrigerated Warehouse-Rail	578	1000sqft	275	577,950	288,975	—	—	—
Refrigerated Warehouse-No Rail	205	1000sqft	97.6	205,095	102,548	—	—	—
Refrigerated Warehouse-Rail	166	1000sqft	78.9	165,782	82,891	—	—	—
Parking Lot	12,363	1000sqft	284	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	93.7	90.5	92.3	252	1.22	3.28	11,297	11,301	3.16	1,136	1,139	2,348	134,036	136,385	240	15.1	9,904	156,787
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	74.0	72.4	98.9	93.2	1.16	3.09	11,297	11,301	3.01	1,136	1,139	2,348	128,048	130,396	240	15.2	9,884	150,796
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	86.0	83.5	92.3	185	1.18	2.92	11,150	11,152	2.81	1,121	1,124	2,348	129,561	131,909	240	15.2	9,893	152,307
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	15.7	15.2	16.8	33.8	0.21	0.53	2,035	2,035	0.51	205	205	389	21,450	21,839	39.7	2.51	1,638	25,216

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	5.70	4.99	71.9	127	1.13	1.77	11,297	11,299	1.69	1,136	1,137	—	117,254	117,254	0.63	12.4	19.9	120,991
Area	83.9	82.4	0.90	108	0.01	0.19	—	0.19	0.14	—	0.14	—	442	442	0.02	< 0.005	—	444
Energy	1.39	0.70	12.6	10.6	0.08	0.96	—	0.96	0.96	—	0.96	—	15,081	15,081	1.33	0.03	—	15,123
Water	—	—	—	—	—	—	—	—	—	—	—	1,096	0.00	1,096	112	2.67	—	4,700
Waste	—	—	—	—	—	—	—	—	—	—	—	1,253	0.00	1,253	125	0.00	—	4,382
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9,884	9,884
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	2.70	2.46	6.88	6.28	0.01	0.36	0.00	0.36	0.36	0.00	0.36	0.00	1,259	1,259	0.05	0.01	0.00	1,263
Total	93.7	90.5	92.3	252	1.22	3.28	11,297	11,301	3.16	1,136	1,139	2,348	134,036	136,385	240	15.1	9,904	156,787
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	5.18	4.49	79.4	76.3	1.07	1.77	11,297	11,299	1.69	1,136	1,137	—	111,708	111,708	0.64	12.5	0.52	115,444
Area	64.7	64.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	1.39	0.70	12.6	10.6	0.08	0.96	—	0.96	0.96	—	0.96	—	15,081	15,081	1.33	0.03	—	15,123
Water	—	—	—	—	—	—	—	—	—	—	—	1,096	0.00	1,096	112	2.67	—	4,700
Waste	—	—	—	—	—	—	—	—	—	—	—	1,253	0.00	1,253	125	0.00	—	4,382
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9,884	9,884
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	2.70	2.46	6.88	6.28	0.01	0.36	0.00	0.36	0.36	0.00	0.36	0.00	1,259	1,259	0.05	0.01	0.00	1,263
Total	74.0	72.4	98.9	93.2	1.16	3.09	11,297	11,301	3.01	1,136	1,139	2,348	128,048	130,396	240	15.2	9,884	150,796

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	5.34	4.63	78.0	94.1	1.09	1.77	11,150	11,151	1.69	1,121	1,123	—	113,981	113,981	0.63	12.5	8.59	117,717
Area	78.9	77.8	0.67	79.5	< 0.005	0.14	—	0.14	0.11	—	0.11	—	327	327	0.01	< 0.005	—	328
Energy	1.39	0.70	12.6	10.6	0.08	0.96	—	0.96	0.96	—	0.96	—	15,081	15,081	1.33	0.03	—	15,123
Water	—	—	—	—	—	—	—	—	—	—	—	1,096	0.00	1,096	112	2.67	—	4,700
Waste	—	—	—	—	—	—	—	—	—	—	—	1,253	0.00	1,253	125	0.00	—	4,382
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9,884	9,884
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	0.37	0.34	0.94	0.86	< 0.005	0.05	0.00	0.05	0.05	0.00	0.05	0.00	173	173	0.01	< 0.005	0.00	173
Total	86.0	83.5	92.3	185	1.18	2.92	11,150	11,152	2.81	1,121	1,124	2,348	129,561	131,909	240	15.2	9,893	152,307
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.97	0.85	14.2	17.2	0.20	0.32	2,035	2,035	0.31	205	205	—	18,871	18,871	0.10	2.06	1.42	19,489
Area	14.4	14.2	0.12	14.5	< 0.005	0.03	—	0.03	0.02	—	0.02	—	54.2	54.2	< 0.005	< 0.005	—	54.4
Energy	0.25	0.13	2.31	1.94	0.01	0.18	—	0.18	0.18	—	0.18	—	2,497	2,497	0.22	< 0.005	—	2,504
Water	—	—	—	—	—	—	—	—	—	—	—	181	0.00	181	18.6	0.44	—	778
Waste	—	—	—	—	—	—	—	—	—	—	—	207	0.00	207	20.7	0.00	—	726
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,636	1,636
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	0.07	0.06	0.17	0.16	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	28.6	28.6	< 0.005	< 0.005	0.00	28.7
Total	15.7	15.2	16.8	33.8	0.21	0.53	2,035	2,035	0.51	205	205	389	21,450	21,839	39.7	2.51	1,638	25,216

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	3.29	3.06	2.66	98.2	0.33	0.05	5,831	5,831	0.05	585	585	—	33,300	33,300	0.26	0.44	3.00	33,441
Unrefrigerated Warehouse-Rail	1.54	1.17	53.5	12.2	0.58	1.33	3,638	3,639	1.27	366	368	—	61,757	61,757	0.26	9.26	12.8	64,537
Refrigerated Warehouse-No Rail	0.44	0.41	0.36	13.2	0.04	0.01	785	785	0.01	78.8	78.8	—	4,482	4,482	0.04	0.06	0.40	4,501
Refrigerated Warehouse-Rail	0.44	0.34	15.3	3.50	0.17	0.38	1,044	1,044	0.36	105	105	—	17,715	17,715	0.07	2.66	3.68	18,512
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	5.70	4.99	71.9	127	1.13	1.77	11,297	11,299	1.69	1,136	1,137	—	117,254	117,254	0.63	12.4	19.9	120,991
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	2.92	2.71	3.00	53.2	0.28	0.05	5,831	5,831	0.05	585	585	—	28,378	28,378	0.28	0.49	0.08	28,529

Unrefrigerated	1.45	1.10	59.0	12.4	0.58	1.33	3,638	3,639	1.27	366	368	—	61,787	61,787	0.25	9.27	0.33	64,556
Refrigerated Warehouse-No Rail	0.39	0.36	0.40	7.16	0.04	0.01	785	785	0.01	78.8	78.8	—	3,820	3,820	0.04	0.07	0.01	3,840
Refrigerated Warehouse-Rail	0.42	0.32	16.9	3.56	0.17	0.38	1,044	1,044	0.36	105	105	—	17,723	17,723	0.07	2.66	0.10	18,518
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	5.18	4.49	79.4	76.3	1.07	1.77	11,297	11,299	1.69	1,136	1,137	—	111,708	111,708	0.64	12.5	0.52	115,444
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.55	0.51	0.52	12.6	0.05	0.01	1,050	1,050	0.01	105	105	—	5,033	5,033	0.04	0.08	0.21	5,058
Unrefrigerated Warehouse-Rail	0.27	0.21	10.6	2.24	0.11	0.24	655	656	0.23	66.0	66.2	—	10,227	10,227	0.04	1.53	0.92	10,686
Refrigerated Warehouse-No Rail	0.07	0.07	0.07	1.69	0.01	< 0.005	141	141	< 0.005	14.2	14.2	—	677	677	0.01	0.01	0.03	681
Refrigerated Warehouse-Rail	0.08	0.06	3.04	0.64	0.03	0.07	188	188	0.07	18.9	19.0	—	2,933	2,933	0.01	0.44	0.26	3,065
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.97	0.85	14.2	17.2	0.20	0.32	2,035	2,035	0.31	205	205	—	18,871	18,871	0.10	2.06	1.42	19,489

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Unrefrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Refrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
undefined	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unrefrigerated	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Unrefrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Refrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
undefined	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Unrefrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Refrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
undefined	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.86	0.43	7.81	6.56	0.05	0.59	—	0.59	0.59	—	0.59	—	9,320	9,320	0.82	0.02	—	9,346
Unrefrigerated Warehouse-Rail	0.33	0.16	2.96	2.49	0.02	0.23	—	0.23	0.23	—	0.23	—	3,535	3,535	0.31	0.01	—	3,545
Refrigerated Warehouse-No Rail	0.11	0.06	1.03	0.87	0.01	0.08	—	0.08	0.08	—	0.08	—	1,231	1,231	0.11	< 0.005	—	1,234
Refrigerated Warehouse-Rail	0.09	0.05	0.83	0.70	0.01	0.06	—	0.06	0.06	—	0.06	—	995	995	0.09	< 0.005	—	998
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Total	1.39	0.70	12.6	10.6	0.08	0.96	—	0.96	0.96	—	0.96	—	15,081	15,081	1.33	0.03	—	15,123
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.86	0.43	7.81	6.56	0.05	0.59	—	0.59	0.59	—	0.59	—	9,320	9,320	0.82	0.02	—	9,346
Unrefrigerated Warehouse-Rail	0.33	0.16	2.96	2.49	0.02	0.23	—	0.23	0.23	—	0.23	—	3,535	3,535	0.31	0.01	—	3,545
Refrigerated Warehouse-No Rail	0.11	0.06	1.03	0.87	0.01	0.08	—	0.08	0.08	—	0.08	—	1,231	1,231	0.11	< 0.005	—	1,234
Refrigerated Warehouse-Rail	0.09	0.05	0.83	0.70	0.01	0.06	—	0.06	0.06	—	0.06	—	995	995	0.09	< 0.005	—	998
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	1.39	0.70	12.6	10.6	0.08	0.96	—	0.96	0.96	—	0.96	—	15,081	15,081	1.33	0.03	—	15,123
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.16	0.08	1.43	1.20	0.01	0.11	—	0.11	0.11	—	0.11	—	1,543	1,543	0.14	< 0.005	—	1,547
Unrefrigerated Warehouse-Rail	0.06	0.03	0.54	0.45	< 0.005	0.04	—	0.04	0.04	—	0.04	—	585	585	0.05	< 0.005	—	587

Refrigerated Warehouse-No	0.02	0.01	0.19	0.16	< 0.005	0.01	—	0.01	0.01	—	0.01	—	204	204	0.02	< 0.005	—	204
Refrigerated Warehouse-Rail	0.02	0.01	0.15	0.13	< 0.005	0.01	—	0.01	0.01	—	0.01	—	165	165	0.01	< 0.005	—	165
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.25	0.13	2.31	1.94	0.01	0.18	—	0.18	0.18	—	0.18	—	2,497	2,497	0.22	< 0.005	—	2,504

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	53.9	53.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	10.8	10.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	19.2	17.7	0.90	108	0.01	0.19	—	0.19	0.14	—	0.14	—	442	442	0.02	< 0.005	—	444
Total	83.9	82.4	0.90	108	0.01	0.19	—	0.19	0.14	—	0.14	—	442	442	0.02	< 0.005	—	444
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Consum Products	53.9	53.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	10.8	10.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	64.7	64.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	9.83	9.83	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	1.98	1.98	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	2.59	2.39	0.12	14.5	< 0.005	0.03	—	0.03	0.02	—	0.02	—	54.2	54.2	< 0.005	< 0.005	—	54.4
Total	14.4	14.2	0.12	14.5	< 0.005	0.03	—	0.03	0.02	—	0.02	—	54.2	54.2	< 0.005	< 0.005	—	54.4

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	675	0.00	675	69.2	1.64	—	2,896

Unrefrig Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	256	0.00	256	26.3	0.62	—	1,099
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	90.9	0.00	90.9	9.32	0.22	—	390
Refrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	73.5	0.00	73.5	7.53	0.18	—	315
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1,096	0.00	1,096	112	2.67	—	4,700
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	675	0.00	675	69.2	1.64	—	2,896
Unrefrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	256	0.00	256	26.3	0.62	—	1,099
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	90.9	0.00	90.9	9.32	0.22	—	390
Refrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	73.5	0.00	73.5	7.53	0.18	—	315
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1,096	0.00	1,096	112	2.67	—	4,700

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	112	0.00	112	11.5	0.27	—	480
Unrefrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	42.4	0.00	42.4	4.35	0.10	—	182
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	15.0	0.00	15.0	1.54	0.04	—	64.5
Refrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	12.2	0.00	12.2	1.25	0.03	—	52.2
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	181	0.00	181	18.6	0.44	—	778

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	772	0.00	772	77.1	0.00	—	2,701

Unrefrig Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	293	0.00	293	29.3	0.00	—	1,024
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	104	0.00	104	10.4	0.00	—	364
Refrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	84.0	0.00	84.0	8.39	0.00	—	294
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1,253	0.00	1,253	125	0.00	—	4,382
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	772	0.00	772	77.1	0.00	—	2,701
Unrefrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	293	0.00	293	29.3	0.00	—	1,024
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	104	0.00	104	10.4	0.00	—	364
Refrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	84.0	0.00	84.0	8.39	0.00	—	294
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1,253	0.00	1,253	125	0.00	—	4,382

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	128	0.00	128	12.8	0.00	—	447
Unrefrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	48.5	0.00	48.5	4.84	0.00	—	170
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	17.2	0.00	17.2	1.72	0.00	—	60.2
Refrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	13.9	0.00	13.9	1.39	0.00	—	48.6
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	207	0.00	207	20.7	0.00	—	726

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5,466	5,466

Refriger Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4,418	4,418
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9,884	9,884
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5,466	5,466
Refrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4,418	4,418
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9,884	9,884
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	905	905
Refrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	731	731
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,636	1,636

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Rough Terrain Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Rough Terrain Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Rough Terrain Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Emergency	2.70	2.46	6.88	6.28	0.01	0.36	0.00	0.36	0.36	0.00	0.36	0.00	1,259	1,259	0.05	0.01	0.00	1,263
Total	2.70	2.46	6.88	6.28	0.01	0.36	0.00	0.36	0.36	0.00	0.36	0.00	1,259	1,259	0.05	0.01	0.00	1,263
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	2.70	2.46	6.88	6.28	0.01	0.36	0.00	0.36	0.36	0.00	0.36	0.00	1,259	1,259	0.05	0.01	0.00	1,263
Total	2.70	2.46	6.88	6.28	0.01	0.36	0.00	0.36	0.36	0.00	0.36	0.00	1,259	1,259	0.05	0.01	0.00	1,263
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.07	0.06	0.17	0.16	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	28.6	28.6	< 0.005	< 0.005	0.00	28.7
Total	0.07	0.06	0.17	0.16	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	28.6	28.6	< 0.005	< 0.005	0.00	28.7

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Unrefrigerated Warehouse-No Rail	2,133	2,133	2,133	778,604	51,951	51,951	51,951	18,961,941
Unrefrigerated Warehouse-Rail	809	809	809	295,333	32,365	32,365	32,365	11,813,306
Refrigerated Warehouse-No Rail	287	287	287	104,804	6,993	6,993	6,993	2,552,360
Refrigerated Warehouse-Rail	232	232	232	84,715	9,284	9,284	9,284	3,388,584
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	3,708,771	1,236,257	741,754

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	270

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Unrefrigerated Warehouse-No Rail	17,087,258	0.00	0.0000	0.0000	29,081,532
Unrefrigerated Warehouse-Rail	6,481,371	0.00	0.0000	0.0000	11,030,921
Refrigerated Warehouse-No Rail	4,380,544	0.00	0.0000	0.0000	3,839,954
Refrigerated Warehouse-Rail	3,540,873	0.00	0.0000	0.0000	3,103,905
Parking Lot	10,829,611	0.00	0.0000	0.0000	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Unrefrigerated Warehouse-No Rail	352,352,700	15,594,863

Unrefrigerated Warehouse-Rail	133,651,030	5,915,286
Refrigerated Warehouse-No Rail	47,428,219	2,099,146
Refrigerated Warehouse-Rail	38,337,088	1,696,770
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Unrefrigerated Warehouse-No Rail	1,432	—
Unrefrigerated Warehouse-Rail	543	—
Refrigerated Warehouse-No Rail	193	—
Refrigerated Warehouse-Rail	156	—
Parking Lot	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Refrigerated Warehouse-No Rail	Cold storage	R-404A	3,922	7.50	7.50	7.50	25.0
Refrigerated Warehouse-Rail	Cold storage	R-404A	3,922	7.50	7.50	7.50	25.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Forklifts	Electric	Average	297	24.0	200	0.20

Rough Terrain Forklifts	Electric	Average	9.00	24.0	200	0.40

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
Emergency Generator	Diesel	3.00	1.00	50.0	500	0.73

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	32.8	annual days of extreme heat
Extreme Precipitation	0.00	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.19	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A

Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	11.6
AQ-PM	19.1
AQ-DPM	9.09
Drinking Water	30.6
Lead Risk Housing	50.8
Pesticides	90.5
Toxic Releases	7.58
Traffic	3.06
Effect Indicators	—
CleanUp Sites	74.2
Groundwater	77.9
Haz Waste Facilities/Generators	93.2
Impaired Water Bodies	100.0
Solid Waste	86.5
Sensitive Population	—
Asthma	87.6
Cardio-vascular	83.2
Low Birth Weights	26.9
Socioeconomic Factor Indicators	—
Education	82.7
Housing	51.4
Linguistic	88.8
Poverty	94.9
Unemployment	99.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	16.66880534
Employed	7.173104068
Median HI	5.299627871
Education	—
Bachelor's or higher	5.017323239
High school enrollment	16.8741178
Preschool enrollment	68.89516233
Transportation	—
Auto Access	18.40112922
Active commuting	51.10997049
Social	—
2-parent households	13.28114975
Voting	16.79712563
Neighborhood	—
Alcohol availability	70.25535737
Park access	33.85089183
Retail density	4.311561658
Supermarket access	49.58295907
Tree canopy	0.782753753
Housing	—
Homeownership	38.3036058
Housing habitability	30.96368536
Low-inc homeowner severe housing cost burden	26.76761196
Low-inc renter severe housing cost burden	52.89362248

Uncrowded housing	38.58591043
Health Outcomes	—
Insured adults	21.00603105
Arthritis	0.0
Asthma ER Admissions	30.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	41.7
Cognitively Disabled	50.3
Physically Disabled	19.5
Heart Attack ER Admissions	46.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	54.3
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0

Children	14.1
Elderly	42.0
English Speaking	18.7
Foreign-born	65.3
Outdoor Workers	5.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	85.8
Traffic Density	4.9
Traffic Access	23.0
Other Indices	—
Hardship	92.9
Other Decision Support	—
2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	82.0
Healthy Places Index Score for Project Location (b)	11.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Land use data are based on applicant-provided buildout assumptions.
Operations: Vehicle Data	Trip rates are based on ITE Land Use Code 154.
Operations: Landscape Equipment	Assumed 270 summer days for desert region.
Operations: Off-Road Equipment	Assumed forklifts and yard trucks (modeled as rough terrain forklifts) as part of project operations.
Operations: Road Dust	All roads used by future developments projects within the Specific Plan Area would be required to be paved. Per ICAPCD guidance a value of 85% paved is assumed in the modeling to account for the high levels of entrained dust generated from vehicle travel on paved roadways in the region.
Operations: Fleet Mix	Fleet mix adjusted for passenger vehicles (no-rail land uses) and trucks (rail land uses).
Operations: Emergency Generators and Fire Pumps	Assumed 3 back-up generators operating 1 hour/day and 50 hours/year for maintenance and testing.
Operations: Water and Waste Water	Water data are based on applicant-provided calculations for the land use.
Characteristics: Utility Information	GHG intensity factors adjusted per RPS requirements.

Lithium Valley Operation - Phase 3 - Manufacturing of Green Industrial Equipment Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Lithium Valley Operation - Phase 3 - Manufacturing of Green Industrial Equipment
Operational Year	2050
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	4.80
Location	33.18829759139308, -115.6026869228474
County	Imperial
City	Unincorporated
Air District	Imperial County APCD
Air Basin	Salton Sea
TAZ	5600
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Manufacturing	1,760	1000sqft	1,396	1,760,063	880,032	—	—	—
Parking Lot	8,800	1000sqft	202	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	104	97.8	75.2	697	2.09	2.65	31,229	31,232	2.55	3,136	3,138	1,654	221,498	223,152	172	9.52	485	230,762
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	85.5	80.8	81.2	404	1.85	2.51	31,229	31,231	2.45	3,136	3,138	1,654	197,797	199,451	172	9.80	459	207,120
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	83.9	79.7	57.6	391	1.38	2.06	21,367	21,370	2.00	2,146	2,148	1,654	149,177	150,832	170	7.09	466	157,672
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	15.3	14.5	10.5	71.3	0.25	0.38	3,900	3,900	0.36	392	392	274	24,698	24,972	28.2	1.17	77.2	26,104

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	40.5	36.6	54.7	603	1.98	1.10	31,229	31,230	1.04	3,136	3,137	—	202,020	202,020	3.25	8.31	26.7	204,605

Area	59.7	58.7	0.64	76.5	< 0.005	0.14	—	0.14	0.10	—	0.10	—	315	315	0.01	< 0.005	—	316
Energy	1.69	0.84	15.4	12.9	0.09	1.17	—	1.17	1.17	—	1.17	—	18,324	18,324	1.62	0.03	—	18,375
Water	—	—	—	—	—	—	—	—	—	—	—	478	0.00	478	49.0	1.17	—	2,051
Waste	—	—	—	—	—	—	—	—	—	—	—	1,176	0.00	1,176	118	0.00	—	4,115
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	458	458
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	1.80	1.64	4.59	4.18	0.01	0.24	0.00	0.24	0.24	0.00	0.24	0.00	840	840	0.03	0.01	0.00	842
Total	104	97.8	75.2	697	2.09	2.65	31,229	31,232	2.55	3,136	3,138	1,654	221,498	223,152	172	9.52	485	230,762
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	35.9	32.2	61.3	386	1.75	1.10	31,229	31,230	1.04	3,136	3,137	—	178,634	178,634	3.28	8.60	0.69	181,279
Area	46.1	46.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	1.69	0.84	15.4	12.9	0.09	1.17	—	1.17	1.17	—	1.17	—	18,324	18,324	1.62	0.03	—	18,375
Water	—	—	—	—	—	—	—	—	—	—	—	478	0.00	478	49.0	1.17	—	2,051
Waste	—	—	—	—	—	—	—	—	—	—	—	1,176	0.00	1,176	118	0.00	—	4,115
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	458	458
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	1.80	1.64	4.59	4.18	0.01	0.24	0.00	0.24	0.24	0.00	0.24	0.00	840	840	0.03	0.01	0.00	842
Total	85.5	80.8	81.2	404	1.85	2.51	31,229	31,231	2.45	3,136	3,138	1,654	197,797	199,451	172	9.80	459	207,120
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	25.9	23.2	41.2	321	1.28	0.76	21,367	21,368	0.72	2,146	2,147	—	130,506	130,506	2.24	5.88	7.98	132,323
Area	56.2	55.4	0.48	56.6	< 0.005	0.10	—	0.10	0.08	—	0.08	—	233	233	0.01	< 0.005	—	234
Energy	1.69	0.84	15.4	12.9	0.09	1.17	—	1.17	1.17	—	1.17	—	18,324	18,324	1.62	0.03	—	18,375
Water	—	—	—	—	—	—	—	—	—	—	—	478	0.00	478	49.0	1.17	—	2,051
Waste	—	—	—	—	—	—	—	—	—	—	—	1,176	0.00	1,176	118	0.00	—	4,115

Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	458	458
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	0.25	0.22	0.63	0.57	< 0.005	0.03	0.00	0.03	0.03	0.00	0.03	0.00	115	115	< 0.005	< 0.005	0.00	115
Total	83.9	79.7	57.6	391	1.38	2.06	21,367	21,370	2.00	2,146	2,148	1,654	149,177	150,832	170	7.09	466	157,672
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	4.72	4.24	7.51	58.5	0.23	0.14	3,900	3,900	0.13	392	392	—	21,607	21,607	0.37	0.97	1.32	21,908
Area	10.2	10.1	0.09	10.3	< 0.005	0.02	—	0.02	0.01	—	0.01	—	38.6	38.6	< 0.005	< 0.005	—	38.7
Energy	0.31	0.15	2.80	2.35	0.02	0.21	—	0.21	0.21	—	0.21	—	3,034	3,034	0.27	0.01	—	3,042
Water	—	—	—	—	—	—	—	—	—	—	—	79.2	0.00	79.2	8.12	0.19	—	340
Waste	—	—	—	—	—	—	—	—	—	—	—	195	0.00	195	19.5	0.00	—	681
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	75.9	75.9
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	0.05	0.04	0.11	0.10	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	19.0	19.0	< 0.005	< 0.005	0.00	19.1
Total	15.3	14.5	10.5	71.3	0.25	0.38	3,900	3,900	0.36	392	392	274	24,698	24,972	28.2	1.17	77.2	26,104

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Manufacturing	40.5	36.6	54.7	603	1.98	1.10	31,229	31,230	1.04	3,136	3,137	—	202,020	202,020	3.25	8.31	26.7	204,605
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	40.5	36.6	54.7	603	1.98	1.10	31,229	31,230	1.04	3,136	3,137	—	202,020	202,020	3.25	8.31	26.7	204,605
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	35.9	32.2	61.3	386	1.75	1.10	31,229	31,230	1.04	3,136	3,137	—	178,634	178,634	3.28	8.60	0.69	181,279
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	35.9	32.2	61.3	386	1.75	1.10	31,229	31,230	1.04	3,136	3,137	—	178,634	178,634	3.28	8.60	0.69	181,279
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	4.72	4.24	7.51	58.5	0.23	0.14	3,900	3,900	0.13	392	392	—	21,607	21,607	0.37	0.97	1.32	21,908
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	4.72	4.24	7.51	58.5	0.23	0.14	3,900	3,900	0.13	392	392	—	21,607	21,607	0.37	0.97	1.32	21,908

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

undefine	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
undefined	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
undefined	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	1.69	0.84	15.4	12.9	0.09	1.17	—	1.17	1.17	—	1.17	—	18,324	18,324	1.62	0.03	—	18,375
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	1.69	0.84	15.4	12.9	0.09	1.17	—	1.17	1.17	—	1.17	—	18,324	18,324	1.62	0.03	—	18,375

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	1.69	0.84	15.4	12.9	0.09	1.17	—	1.17	1.17	—	1.17	—	18,324	18,324	1.62	0.03	—	18,375
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	1.69	0.84	15.4	12.9	0.09	1.17	—	1.17	1.17	—	1.17	—	18,324	18,324	1.62	0.03	—	18,375
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	0.31	0.15	2.80	2.35	0.02	0.21	—	0.21	0.21	—	0.21	—	3,034	3,034	0.27	0.01	—	3,042
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.31	0.15	2.80	2.35	0.02	0.21	—	0.21	0.21	—	0.21	—	3,034	3,034	0.27	0.01	—	3,042

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	38.4	38.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	7.71	7.71	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	13.6	12.6	0.64	76.5	< 0.005	0.14	—	0.14	0.10	—	0.10	—	315	315	0.01	< 0.005	—	316

Total	59.7	58.7	0.64	76.5	< 0.005	0.14	—	0.14	0.10	—	0.10	—	315	315	0.01	< 0.005	—	316
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	38.4	38.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	7.71	7.71	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	46.1	46.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	7.00	7.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	1.41	1.41	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	1.84	1.70	0.09	10.3	< 0.005	0.02	—	0.02	0.01	—	0.01	—	38.6	38.6	< 0.005	< 0.005	—	38.7
Total	10.2	10.1	0.09	10.3	< 0.005	0.02	—	0.02	0.01	—	0.01	—	38.6	38.6	< 0.005	< 0.005	—	38.7

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	478	0.00	478	49.0	1.17	—	2,051
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	478	0.00	478	49.0	1.17	—	2,051
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	478	0.00	478	49.0	1.17	—	2,051
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	478	0.00	478	49.0	1.17	—	2,051
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	79.2	0.00	79.2	8.12	0.19	—	340
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	79.2	0.00	79.2	8.12	0.19	—	340

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	1,176	0.00	1,176	118	0.00	—	4,115

Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1,176	0.00	1,176	118	0.00	—	4,115
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	1,176	0.00	1,176	118	0.00	—	4,115
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1,176	0.00	1,176	118	0.00	—	4,115
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	195	0.00	195	19.5	0.00	—	681
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	195	0.00	195	19.5	0.00	—	681

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	458	458
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	458	458
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Manufac	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	458	458
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	458	458
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	75.9	75.9
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	75.9	75.9

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	1.80	1.64	4.59	4.18	0.01	0.24	0.00	0.24	0.24	0.00	0.24	0.00	840	840	0.03	0.01	0.00	842
Total	1.80	1.64	4.59	4.18	0.01	0.24	0.00	0.24	0.24	0.00	0.24	0.00	840	840	0.03	0.01	0.00	842
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	1.80	1.64	4.59	4.18	0.01	0.24	0.00	0.24	0.24	0.00	0.24	0.00	840	840	0.03	0.01	0.00	842
Total	1.80	1.64	4.59	4.18	0.01	0.24	0.00	0.24	0.24	0.00	0.24	0.00	840	840	0.03	0.01	0.00	842
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.05	0.04	0.11	0.10	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	19.0	19.0	< 0.005	< 0.005	0.00	19.1
Total	0.05	0.04	0.11	0.10	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	19.0	19.0	< 0.005	< 0.005	0.00	19.1

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Manufacturing	8,360	13,658	10,824	3,456,236	170,289	278,198	220,479	70,399,198
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	2,640,095	880,032	528,019

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	270

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Manufacturing	53,460,903	0.00	0.0000	0.0000	57,174,948
Parking Lot	7,709,080	0.00	0.0000	0.0000	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Manufacturing	249,565,954	11,045,601
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Manufacturing	2,182	—
Parking Lot	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Manufacturing	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Forklifts	Electric	Average	211	8.00	200	0.20

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
Emergency Generator	Diesel	2.00	1.00	50.0	500	0.73

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	32.8	annual days of extreme heat
Extreme Precipitation	0.00	annual days with precipitation above 20 mm

Sea Level Rise	—	meters of inundation depth
Wildfire	0.19	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A

Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	11.6
AQ-PM	19.1
AQ-DPM	9.09
Drinking Water	30.6
Lead Risk Housing	50.8
Pesticides	90.5
Toxic Releases	7.58
Traffic	3.06
Effect Indicators	—

CleanUp Sites	74.2
Groundwater	77.9
Haz Waste Facilities/Generators	93.2
Impaired Water Bodies	100.0
Solid Waste	86.5
Sensitive Population	—
Asthma	87.6
Cardio-vascular	83.2
Low Birth Weights	26.9
Socioeconomic Factor Indicators	—
Education	82.7
Housing	51.4
Linguistic	88.8
Poverty	94.9
Unemployment	99.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	16.66880534
Employed	7.173104068
Median HI	5.299627871
Education	—
Bachelor's or higher	5.017323239
High school enrollment	16.8741178
Preschool enrollment	68.89516233
Transportation	—

Auto Access	18.40112922
Active commuting	51.10997049
Social	—
2-parent households	13.28114975
Voting	16.79712563
Neighborhood	—
Alcohol availability	70.25535737
Park access	33.85089183
Retail density	4.311561658
Supermarket access	49.58295907
Tree canopy	0.782753753
Housing	—
Homeownership	38.3036058
Housing habitability	30.96368536
Low-inc homeowner severe housing cost burden	26.76761196
Low-inc renter severe housing cost burden	52.89362248
Uncrowded housing	38.58591043
Health Outcomes	—
Insured adults	21.00603105
Arthritis	0.0
Asthma ER Admissions	30.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	41.7

Cognitively Disabled	50.3
Physically Disabled	19.5
Heart Attack ER Admissions	46.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	54.3
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	14.1
Elderly	42.0
English Speaking	18.7
Foreign-born	65.3
Outdoor Workers	5.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	85.8
Traffic Density	4.9
Traffic Access	23.0
Other Indices	—
Hardship	92.9
Other Decision Support	—

2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	82.0
Healthy Places Index Score for Project Location (b)	11.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Land use data are based on applicant-provided buildout assumptions.
Operations: Vehicle Data	Trip rates are based on ITE Land Use Code 140.
Operations: Landscape Equipment	Assumed 270 summer days for desert region.
Operations: Emergency Generators and Fire Pumps	Assumed 2 back-up generators operating 1 hour/day and 50 hours/year as part of project operations.

Operations: Road Dust	All roads used by future developments projects within the Specific Plan Area would be required to be paved. Per ICAPCD guidance a value of 85% paved is assumed in the modeling to account for the high levels of entrained dust generated from vehicle travel on paved roadways in the region.
Operations: Off-Road Equipment	Offroad equipment assumed as part of project operations.
Operations: Water and Waste Water	Water data are based on applicant-provided calculations for the land use.
Characteristics: Utility Information	GHG intensity factors adjusted per RPS requirements.

Lithium Valley Operation - Phase 3 - Mineral Recovery, Processing, and Production Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Lithium Valley Operation - Phase 3 - Mineral Recovery, Processing, and Production
Operational Year	2050
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	4.80
Location	33.18829759139308, -115.6026869228474
County	Imperial
City	Unincorporated
Air District	Imperial County APCD
Air Basin	Salton Sea
TAZ	5600
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
General Heavy Industry	4,880	1000sqft	4,630	4,879,554	1,019,841	—	—	—
Parking Lot	10,198	1000sqft	234	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	205	196	149	559	1.23	6.75	13,723	13,730	6.63	1,378	1,385	9,520	149,682	159,203	974	19.1	1,282	190,522
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	165	160	150	252	1.11	6.38	13,723	13,729	6.35	1,378	1,384	9,520	138,533	148,053	974	19.2	1,270	179,396
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	172	166	73.0	340	0.84	4.21	9,359	9,363	4.13	940	944	9,520	109,874	119,395	973	17.9	1,274	150,347
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	31.3	30.3	13.3	62.0	0.15	0.77	1,708	1,709	0.75	172	172	1,576	18,191	19,767	161	2.97	211	24,892

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	17.8	16.1	24.0	265	0.87	0.48	13,723	13,724	0.46	1,378	1,378	—	88,775	88,775	1.43	3.65	11.7	89,911

Area	163	160	1.79	212	0.01	0.38	—	0.38	0.28	—	0.28	—	873	873	0.04	0.01	—	876
Energy	4.68	2.34	42.6	35.8	0.26	3.24	—	3.24	3.24	—	3.24	—	50,800	50,800	4.50	0.10	—	50,941
Water	—	—	—	—	—	—	—	—	—	—	—	6,260	0.00	6,260	642	15.3	—	26,850
Waste	—	—	—	—	—	—	—	—	—	—	—	3,261	0.00	3,261	326	0.00	—	11,409
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,270	1,270
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	19.8	18.0	80.7	46.0	0.09	2.66	0.00	2.66	2.66	0.00	2.66	0.00	9,235	9,235	0.37	0.07	0.00	9,265
Total	205	196	149	559	1.23	6.75	13,723	13,730	6.63	1,378	1,385	9,520	149,682	159,203	974	19.1	1,282	190,522
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	15.8	14.2	26.9	170	0.77	0.48	13,723	13,724	0.46	1,378	1,378	—	78,498	78,498	1.44	3.78	0.30	79,660
Area	125	125	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	4.68	2.34	42.6	35.8	0.26	3.24	—	3.24	3.24	—	3.24	—	50,800	50,800	4.50	0.10	—	50,941
Water	—	—	—	—	—	—	—	—	—	—	—	6,260	0.00	6,260	642	15.3	—	26,850
Waste	—	—	—	—	—	—	—	—	—	—	—	3,261	0.00	3,261	326	0.00	—	11,409
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,270	1,270
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	19.8	18.0	80.7	46.0	0.09	2.66	0.00	2.66	2.66	0.00	2.66	0.00	9,235	9,235	0.37	0.07	0.00	9,265
Total	165	160	150	252	1.11	6.38	13,723	13,729	6.35	1,378	1,384	9,520	138,533	148,053	974	19.2	1,270	179,396
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	11.3	10.2	18.0	140	0.56	0.33	9,359	9,360	0.32	940	940	—	57,163	57,163	0.98	2.58	3.50	57,960
Area	153	151	1.32	157	0.01	0.28	—	0.28	0.21	—	0.21	—	646	646	0.03	0.01	—	648
Energy	4.68	2.34	42.6	35.8	0.26	3.24	—	3.24	3.24	—	3.24	—	50,800	50,800	4.50	0.10	—	50,941
Water	—	—	—	—	—	—	—	—	—	—	—	6,260	0.00	6,260	642	15.3	—	26,850
Waste	—	—	—	—	—	—	—	—	—	—	—	3,261	0.00	3,261	326	0.00	—	11,409

Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,270	1,270
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	2.72	2.47	11.1	6.31	0.01	0.36	0.00	0.36	0.36	0.00	0.36	0.00	1,265	1,265	0.05	0.01	0.00	1,269
Total	172	166	73.0	340	0.84	4.21	9,359	9,363	4.13	940	944	9,520	109,874	119,395	973	17.9	1,274	150,347
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	2.07	1.86	3.29	25.6	0.10	0.06	1,708	1,708	0.06	172	172	—	9,464	9,464	0.16	0.43	0.58	9,596
Area	27.9	27.5	0.24	28.7	< 0.005	0.05	—	0.05	0.04	—	0.04	—	107	107	< 0.005	< 0.005	—	107
Energy	0.85	0.43	7.77	6.53	0.05	0.59	—	0.59	0.59	—	0.59	—	8,411	8,411	0.74	0.02	—	8,434
Water	—	—	—	—	—	—	—	—	—	—	—	1,036	0.00	1,036	106	2.52	—	4,445
Waste	—	—	—	—	—	—	—	—	—	—	—	540	0.00	540	54.0	0.00	—	1,889
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	210	210
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	0.50	0.45	2.02	1.15	< 0.005	0.07	0.00	0.07	0.07	0.00	0.07	0.00	209	209	0.01	< 0.005	0.00	210
Total	31.3	30.3	13.3	62.0	0.15	0.77	1,708	1,709	0.75	172	172	1,576	18,191	19,767	161	2.97	211	24,892

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	17.8	16.1	24.0	265	0.87	0.48	13,723	13,724	0.46	1,378	1,378	—	88,775	88,775	1.43	3.65	11.7	89,911
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	17.8	16.1	24.0	265	0.87	0.48	13,723	13,724	0.46	1,378	1,378	—	88,775	88,775	1.43	3.65	11.7	89,911
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	15.8	14.2	26.9	170	0.77	0.48	13,723	13,724	0.46	1,378	1,378	—	78,498	78,498	1.44	3.78	0.30	79,660
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	15.8	14.2	26.9	170	0.77	0.48	13,723	13,724	0.46	1,378	1,378	—	78,498	78,498	1.44	3.78	0.30	79,660
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	2.07	1.86	3.29	25.6	0.10	0.06	1,708	1,708	0.06	172	172	—	9,464	9,464	0.16	0.43	0.58	9,596
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	2.07	1.86	3.29	25.6	0.10	0.06	1,708	1,708	0.06	172	172	—	9,464	9,464	0.16	0.43	0.58	9,596

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
undefined	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
undefined	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
undefined	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	4.68	2.34	42.6	35.8	0.26	3.24	—	3.24	3.24	—	3.24	—	50,800	50,800	4.50	0.10	—	50,941
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	4.68	2.34	42.6	35.8	0.26	3.24	—	3.24	3.24	—	3.24	—	50,800	50,800	4.50	0.10	—	50,941
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	4.68	2.34	42.6	35.8	0.26	3.24	—	3.24	3.24	—	3.24	—	50,800	50,800	4.50	0.10	—	50,941
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	4.68	2.34	42.6	35.8	0.26	3.24	—	3.24	3.24	—	3.24	—	50,800	50,800	4.50	0.10	—	50,941
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.85	0.43	7.77	6.53	0.05	0.59	—	0.59	0.59	—	0.59	—	8,411	8,411	0.74	0.02	—	8,434
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.85	0.43	7.77	6.53	0.05	0.59	—	0.59	0.59	—	0.59	—	8,411	8,411	0.74	0.02	—	8,434

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Consum Products	105	105	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	19.8	19.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	37.8	34.9	1.79	212	0.01	0.38	—	0.38	0.28	—	0.28	—	873	873	0.04	0.01	—	876
Total	163	160	1.79	212	0.01	0.38	—	0.38	0.28	—	0.28	—	873	873	0.04	0.01	—	876
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	105	105	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	19.8	19.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	125	125	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	19.2	19.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	3.61	3.61	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	5.10	4.71	0.24	28.7	< 0.005	0.05	—	0.05	0.04	—	0.04	—	107	107	< 0.005	< 0.005	—	107
Total	27.9	27.5	0.24	28.7	< 0.005	0.05	—	0.05	0.04	—	0.04	—	107	107	< 0.005	< 0.005	—	107

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	6,260	0.00	6,260	642	15.3	—	26,850
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	6,260	0.00	6,260	642	15.3	—	26,850
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	6,260	0.00	6,260	642	15.3	—	26,850
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	6,260	0.00	6,260	642	15.3	—	26,850
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	1,036	0.00	1,036	106	2.52	—	4,445
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1,036	0.00	1,036	106	2.52	—	4,445

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	3,261	0.00	3,261	326	0.00	—	11,409
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	3,261	0.00	3,261	326	0.00	—	11,409
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	3,261	0.00	3,261	326	0.00	—	11,409
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	3,261	0.00	3,261	326	0.00	—	11,409
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	540	0.00	540	54.0	0.00	—	1,889
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	540	0.00	540	54.0	0.00	—	1,889

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,270	1,270
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,270	1,270
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,270	1,270
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,270	1,270
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	210	210
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	210	210

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	19.8	18.0	80.7	46.0	0.09	2.66	0.00	2.66	2.66	0.00	2.66	0.00	9,235	9,235	0.37	0.07	0.00	9,265
Total	19.8	18.0	80.7	46.0	0.09	2.66	0.00	2.66	2.66	0.00	2.66	0.00	9,235	9,235	0.37	0.07	0.00	9,265
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	19.8	18.0	80.7	46.0	0.09	2.66	0.00	2.66	2.66	0.00	2.66	0.00	9,235	9,235	0.37	0.07	0.00	9,265
Total	19.8	18.0	80.7	46.0	0.09	2.66	0.00	2.66	2.66	0.00	2.66	0.00	9,235	9,235	0.37	0.07	0.00	9,265
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Emerge Generator	0.50	0.45	2.02	1.15	< 0.005	0.07	0.00	0.07	0.07	0.00	0.07	0.00	209	209	0.01	< 0.005	0.00	210
Total	0.50	0.45	2.02	1.15	< 0.005	0.07	0.00	0.07	0.07	0.00	0.07	0.00	209	209	0.01	< 0.005	0.00	210

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
General Heavy Industry	3,660	6,002	4,733	1,513,882	74,543	122,250	96,409	30,835,876
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	7,319,331	2,439,777	611,905

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	270

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)

General Heavy Industry	148,213,652	0.00	0.0000	0.0000	158,510,375
Parking Lot	8,933,807	0.00	0.0000	0.0000	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
General Heavy Industry	3,266,596,493	60,434,033
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
General Heavy Industry	6,051	—
Parking Lot	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
General Heavy Industry	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

Forklifts	Electric	Average	12.0	8.00	82.0	0.20

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
Emergency Generator	Diesel	10.0	1.00	50.0	1,100	0.73

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	32.8	annual days of extreme heat
Extreme Precipitation	0.00	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.19	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A

Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	11.6
AQ-PM	19.1
AQ-DPM	9.09
Drinking Water	30.6
Lead Risk Housing	50.8
Pesticides	90.5
Toxic Releases	7.58
Traffic	3.06
Effect Indicators	—
CleanUp Sites	74.2
Groundwater	77.9
Haz Waste Facilities/Generators	93.2
Impaired Water Bodies	100.0
Solid Waste	86.5
Sensitive Population	—
Asthma	87.6
Cardio-vascular	83.2
Low Birth Weights	26.9
Socioeconomic Factor Indicators	—
Education	82.7
Housing	51.4
Linguistic	88.8
Poverty	94.9
Unemployment	99.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	16.66880534
Employed	7.173104068
Median HI	5.299627871
Education	—
Bachelor's or higher	5.017323239
High school enrollment	16.8741178
Preschool enrollment	68.89516233
Transportation	—
Auto Access	18.40112922
Active commuting	51.10997049
Social	—
2-parent households	13.28114975
Voting	16.79712563
Neighborhood	—
Alcohol availability	70.25535737
Park access	33.85089183
Retail density	4.311561658
Supermarket access	49.58295907
Tree canopy	0.782753753
Housing	—
Homeownership	38.3036058
Housing habitability	30.96368536
Low-inc homeowner severe housing cost burden	26.76761196
Low-inc renter severe housing cost burden	52.89362248

Uncrowded housing	38.58591043
Health Outcomes	—
Insured adults	21.00603105
Arthritis	0.0
Asthma ER Admissions	30.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	41.7
Cognitively Disabled	50.3
Physically Disabled	19.5
Heart Attack ER Admissions	46.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	54.3
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0

Children	14.1
Elderly	42.0
English Speaking	18.7
Foreign-born	65.3
Outdoor Workers	5.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	85.8
Traffic Density	4.9
Traffic Access	23.0
Other Indices	—
Hardship	92.9
Other Decision Support	—
2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	82.0
Healthy Places Index Score for Project Location (b)	11.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Land use data are based on applicant-provided buildout assumptions.
Operations: Vehicle Data	Custom trip rates are provided by the applicant.
Operations: Landscape Equipment	Assumed 270 summer days for desert region.
Operations: Emergency Generators and Fire Pumps	Assumed 10 back-up generators operating 1 hour/day and 50 hours/year for maintenance and testing.
Operations: Road Dust	All roads used by future developments projects within the Specific Plan Area would be required to be paved. Per ICAPCD guidance a value of 85% paved is assumed in the modeling to account for the high levels of entrained dust generated from vehicle travel on paved roadways in the region.
Operations: Water and Waste Water	Water data are based on applicant-provided calculations for the land use.
Operations: Off-Road Equipment	Assumed 12 electric forklifts as part of project operations.
Characteristics: Utility Information	GHG intensity factors adjusted per RPS requirements.

Lithium Valley Operation - Phase 3 - Outdoor Storage of Trucks, Trailers, Shipping Containers Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Lithium Valley Operation - Phase 3 - Outdoor Storage of Trucks, Trailers, Shipping Containers
Operational Year	2050
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	4.80
Location	33.18829759139308, -115.6026869228474
County	Imperial
City	Unincorporated
Air District	Imperial County APCD
Air Basin	Salton Sea
TAZ	5600
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Parking Lot	106	Acre	106	0.00	0.00	1,537,982	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.33	1.29	0.59	6.55	0.02	0.01	339	339	0.01	34.0	34.1	0.00	2,193	2,193	0.04	0.09	0.29	2,221
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.28	1.24	0.67	4.20	0.02	0.01	339	339	0.01	34.0	34.1	0.00	1,939	1,939	0.04	0.09	0.01	1,968
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.30	1.25	0.64	5.02	0.02	0.01	335	335	0.01	33.6	33.6	0.00	2,044	2,044	0.04	0.09	0.12	2,072
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.24	0.23	0.12	0.92	< 0.005	< 0.005	61.1	61.1	< 0.005	6.13	6.13	0.00	338	338	0.01	0.02	0.02	343

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.44	0.40	0.59	6.55	0.02	0.01	339	339	0.01	34.0	34.1	—	2,193	2,193	0.04	0.09	0.29	2,221

Area	0.89	0.89	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	1.33	1.29	0.59	6.55	0.02	0.01	339	339	0.01	34.0	34.1	0.00	2,193	2,193	0.04	0.09	0.29	2,221
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.39	0.35	0.67	4.20	0.02	0.01	339	339	0.01	34.0	34.1	—	1,939	1,939	0.04	0.09	0.01	1,968
Area	0.89	0.89	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	1.28	1.24	0.67	4.20	0.02	0.01	339	339	0.01	34.0	34.1	0.00	1,939	1,939	0.04	0.09	0.01	1,968
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.40	0.36	0.64	5.02	0.02	0.01	335	335	0.01	33.6	33.6	—	2,044	2,044	0.04	0.09	0.12	2,072
Area	0.89	0.89	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	1.30	1.25	0.64	5.02	0.02	0.01	335	335	0.01	33.6	33.6	0.00	2,044	2,044	0.04	0.09	0.12	2,072
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.07	0.07	0.12	0.92	< 0.005	< 0.005	61.1	61.1	< 0.005	6.13	6.13	—	338	338	0.01	0.02	0.02	343
Area	0.16	0.16	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	0.24	0.23	0.12	0.92	< 0.005	< 0.005	61.1	61.1	< 0.005	6.13	6.13	0.00	338	338	0.01	0.02	0.02	343

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	0.44	0.40	0.59	6.55	0.02	0.01	339	339	0.01	34.0	34.1	—	2,193	2,193	0.04	0.09	0.29	2,221
Total	0.44	0.40	0.59	6.55	0.02	0.01	339	339	0.01	34.0	34.1	—	2,193	2,193	0.04	0.09	0.29	2,221
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	0.39	0.35	0.67	4.20	0.02	0.01	339	339	0.01	34.0	34.1	—	1,939	1,939	0.04	0.09	0.01	1,968
Total	0.39	0.35	0.67	4.20	0.02	0.01	339	339	0.01	34.0	34.1	—	1,939	1,939	0.04	0.09	0.01	1,968
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	0.07	0.07	0.12	0.92	< 0.005	< 0.005	61.1	61.1	< 0.005	6.13	6.13	—	338	338	0.01	0.02	0.02	343
Total	0.07	0.07	0.12	0.92	< 0.005	< 0.005	61.1	61.1	< 0.005	6.13	6.13	—	338	338	0.01	0.02	0.02	343

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.36	0.36	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.53	0.53	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.89	0.89	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.36	0.36	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architectural Coating	0.53	0.53	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.89	0.89	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.07	0.07	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.10	0.10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.16	0.16	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Parking Lot	148	148	148	54,125	3,020	3,020	3,020	1,102,461

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	0.00	0.00	276,833

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	270

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Parking Lot	4,041,755	0.00	0.0000	0.0000	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Parking Lot	0.00	99,264,232

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Parking Lot	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	32.8	annual days of extreme heat
Extreme Precipitation	0.00	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.19	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A

Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	11.6
AQ-PM	19.1
AQ-DPM	9.09
Drinking Water	30.6
Lead Risk Housing	50.8
Pesticides	90.5
Toxic Releases	7.58
Traffic	3.06
Effect Indicators	—
CleanUp Sites	74.2
Groundwater	77.9
Haz Waste Facilities/Generators	93.2
Impaired Water Bodies	100.0
Solid Waste	86.5
Sensitive Population	—
Asthma	87.6
Cardio-vascular	83.2
Low Birth Weights	26.9
Socioeconomic Factor Indicators	—
Education	82.7
Housing	51.4
Linguistic	88.8
Poverty	94.9
Unemployment	99.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	16.66880534
Employed	7.173104068
Median HI	5.299627871
Education	—
Bachelor's or higher	5.017323239
High school enrollment	16.8741178
Preschool enrollment	68.89516233
Transportation	—
Auto Access	18.40112922
Active commuting	51.10997049
Social	—
2-parent households	13.28114975
Voting	16.79712563
Neighborhood	—
Alcohol availability	70.25535737
Park access	33.85089183
Retail density	4.311561658
Supermarket access	49.58295907
Tree canopy	0.782753753
Housing	—
Homeownership	38.3036058
Housing habitability	30.96368536
Low-inc homeowner severe housing cost burden	26.76761196
Low-inc renter severe housing cost burden	52.89362248

Uncrowded housing	38.58591043
Health Outcomes	—
Insured adults	21.00603105
Arthritis	0.0
Asthma ER Admissions	30.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	41.7
Cognitively Disabled	50.3
Physically Disabled	19.5
Heart Attack ER Admissions	46.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	54.3
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0

Children	14.1
Elderly	42.0
English Speaking	18.7
Foreign-born	65.3
Outdoor Workers	5.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	85.8
Traffic Density	4.9
Traffic Access	23.0
Other Indices	—
Hardship	92.9
Other Decision Support	—
2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	82.0
Healthy Places Index Score for Project Location (b)	11.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	project-specific information
Operations: Vehicle Data	Trip rates are based on ITE Land Use Code 154.
Operations: Landscape Equipment	Assumed 270 summer days for desert region.
Operations: Road Dust	All roads used by future developments projects within the Specific Plan Area would be required to be paved. Per ICAPCD guidance a value of 85% paved is assumed in the modeling to account for the high levels of entrained dust generated from vehicle travel on paved roadways in the region.
Operations: Water and Waste Water	Water data are based on applicant-provided calculations for the land use.
Characteristics: Utility Information	GHG intensity factors adjusted per RPS requirements

Lithium Valley Operation - Phase 3 - Passive Uses Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Lithium Valley Operation - Phase 3 - Passive Uses
Operational Year	2050
Lead Agency	—
Land Use Scale	Plan/community
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	4.80
Location	33.18829759139308, -115.6026869228474
County	Imperial
City	Unincorporated
Air District	Imperial County APCD
Air Basin	Salton Sea
TAZ	5600
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
City Park	9,999	Acre	10,000	0.00	0.00	0.00	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	463	0.00	463	46.3	0.00	0.00	1,621
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	463	0.00	463	46.3	0.00	0.00	1,621
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	463	0.00	463	46.3	0.00	0.00	1,621
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	76.7	0.00	76.7	7.67	0.00	0.00	268

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Area	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	463	0.00	463	46.3	0.00	—	1,621
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	463	0.00	463	46.3	0.00	0.00	1,621
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Area	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	463	0.00	463	46.3	0.00	—	1,621
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	463	0.00	463	46.3	0.00	0.00	1,621
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Area	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	463	0.00	463	46.3	0.00	—	1,621
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	463	0.00	463	46.3	0.00	0.00	1,621
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Area	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	76.7	0.00	76.7	7.67	0.00	—	268
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	76.7	0.00	76.7	7.67	0.00	0.00	268

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Consum Products	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	463	0.00	463	46.3	0.00	—	1,621
Total	—	—	—	—	—	—	—	—	—	—	—	463	0.00	463	46.3	0.00	—	1,621
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	463	0.00	463	46.3	0.00	—	1,621
Total	—	—	—	—	—	—	—	—	—	—	—	463	0.00	463	46.3	0.00	—	1,621
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	76.7	0.00	76.7	7.67	0.00	—	268
Total	—	—	—	—	—	—	—	—	—	—	—	76.7	0.00	76.7	7.67	0.00	—	268

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	0.00	0.00	—

5.10.3. Landscape Equipment

Equipment Type	Fuel Type	Number Per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
City Park	0.00	0.00	0.0000	0.0000	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
City Park	0.00	2,955,592,677

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
City Park	860	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	32.8	annual days of extreme heat
Extreme Precipitation	0.00	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.19	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	11.6
AQ-PM	19.1

AQ-DPM	9.09
Drinking Water	30.6
Lead Risk Housing	50.8
Pesticides	90.5
Toxic Releases	7.58
Traffic	3.06
Effect Indicators	—
CleanUp Sites	74.2
Groundwater	77.9
Haz Waste Facilities/Generators	93.2
Impaired Water Bodies	100.0
Solid Waste	86.5
Sensitive Population	—
Asthma	87.6
Cardio-vascular	83.2
Low Birth Weights	26.9
Socioeconomic Factor Indicators	—
Education	82.7
Housing	51.4
Linguistic	88.8
Poverty	94.9
Unemployment	99.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	16.66880534

Employed	7.173104068
Median HI	5.299627871
Education	—
Bachelor's or higher	5.017323239
High school enrollment	16.8741178
Preschool enrollment	68.89516233
Transportation	—
Auto Access	18.40112922
Active commuting	51.10997049
Social	—
2-parent households	13.28114975
Voting	16.79712563
Neighborhood	—
Alcohol availability	70.25535737
Park access	33.85089183
Retail density	4.311561658
Supermarket access	49.58295907
Tree canopy	0.782753753
Housing	—
Homeownership	38.3036058
Housing habitability	30.96368536
Low-inc homeowner severe housing cost burden	26.76761196
Low-inc renter severe housing cost burden	52.89362248
Uncrowded housing	38.58591043
Health Outcomes	—
Insured adults	21.00603105
Arthritis	0.0
Asthma ER Admissions	30.1

High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	41.7
Cognitively Disabled	50.3
Physically Disabled	19.5
Heart Attack ER Admissions	46.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	54.3
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	14.1
Elderly	42.0
English Speaking	18.7
Foreign-born	65.3
Outdoor Workers	5.4

Climate Change Adaptive Capacity	—
Impervious Surface Cover	85.8
Traffic Density	4.9
Traffic Access	23.0
Other Indices	—
Hardship	92.9
Other Decision Support	—
2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	82.0
Healthy Places Index Score for Project Location (b)	11.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification

Operations: Refrigerants	No sources of refrigerants anticipated as part of operations.
Operations: Road Dust	All roads used by future developments projects within the Specific Plan Area would be required to be paved. Per ICAPCD guidance a value of 85% paved is assumed in the modeling to account for the high levels of entrained dust generated from vehicle travel on paved roadways in the region.
Operations: Water and Waste Water	Water data are based on applicant-provided calculations for the land use.
Characteristics: Utility Information	GHG intensity factors adjusted per RPS requirements.
Operations: Vehicle Data	Trips associated with the restoration/passive land uses were not modeled to generate trips.
Land Use	CalEEMod limits Lot Acreage to 9,999 acres. All modeling values in this section reflect the true acreage of 11,455

Lithium Valley Operation - Phase 3 - Public Transit Hub Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Lithium Valley Operation - Phase 3 - Public Transit Hub
Operational Year	2050
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	4.80
Location	33.18829759139308, -115.6026869228474
County	Imperial
City	Unincorporated
Air District	Imperial County APCD
Air Basin	Salton Sea
TAZ	5600
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Parking Lot	684	1000sqft	15.7	0.00	0.00	—	—	—
General Office Building	137	1000sqft	137	136,768	68,384	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	15.0	13.9	12.8	159	0.49	0.29	7,818	7,818	0.27	785	785	99.1	50,120	50,219	10.8	1.96	6.87	51,080
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	12.7	11.8	14.2	98.0	0.43	0.28	7,818	7,818	0.26	785	785	99.1	44,193	44,292	10.8	2.03	0.50	45,169
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	13.9	12.8	13.8	122	0.46	0.28	7,716	7,716	0.27	775	775	99.1	46,636	46,735	10.8	2.00	3.16	47,606
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.53	2.34	2.52	22.2	0.08	0.05	1,408	1,408	0.05	141	141	16.4	7,721	7,737	1.79	0.33	0.52	7,882

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	10.3	9.31	12.3	152	0.49	0.25	7,818	7,818	0.23	785	785	—	49,626	49,626	0.82	1.88	6.54	50,214

Area	4.64	4.56	0.05	5.95	< 0.005	0.01	—	0.01	0.01	—	0.01	—	24.5	24.5	< 0.005	< 0.005	—	24.5
Energy	0.04	0.02	0.39	0.33	< 0.005	0.03	—	0.03	0.03	—	0.03	—	470	470	0.04	< 0.005	—	471
Water	—	—	—	—	—	—	—	—	—	—	—	30.5	0.00	30.5	3.13	0.07	—	131
Waste	—	—	—	—	—	—	—	—	—	—	—	68.6	0.00	68.6	6.85	0.00	—	240
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.33	0.33
Total	15.0	13.9	12.8	159	0.49	0.29	7,818	7,818	0.27	785	785	99.1	50,120	50,219	10.8	1.96	6.87	51,080
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	9.12	8.18	13.9	97.7	0.43	0.25	7,818	7,818	0.23	785	785	—	43,724	43,724	0.83	1.95	0.17	44,327
Area	3.58	3.58	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.04	0.02	0.39	0.33	< 0.005	0.03	—	0.03	0.03	—	0.03	—	470	470	0.04	< 0.005	—	471
Water	—	—	—	—	—	—	—	—	—	—	—	30.5	0.00	30.5	3.13	0.07	—	131
Waste	—	—	—	—	—	—	—	—	—	—	—	68.6	0.00	68.6	6.85	0.00	—	240
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.33	0.33
Total	12.7	11.8	14.2	98.0	0.43	0.28	7,818	7,818	0.26	785	785	99.1	44,193	44,292	10.8	2.03	0.50	45,169
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	9.47	8.51	13.4	117	0.45	0.25	7,716	7,716	0.23	775	775	—	46,148	46,148	0.82	1.93	2.82	46,745
Area	4.36	4.30	0.04	4.40	< 0.005	0.01	—	0.01	0.01	—	0.01	—	18.1	18.1	< 0.005	< 0.005	—	18.2
Energy	0.04	0.02	0.39	0.33	< 0.005	0.03	—	0.03	0.03	—	0.03	—	470	470	0.04	< 0.005	—	471
Water	—	—	—	—	—	—	—	—	—	—	—	30.5	0.00	30.5	3.13	0.07	—	131
Waste	—	—	—	—	—	—	—	—	—	—	—	68.6	0.00	68.6	6.85	0.00	—	240
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.33	0.33
Total	13.9	12.8	13.8	122	0.46	0.28	7,716	7,716	0.27	775	775	99.1	46,636	46,735	10.8	2.00	3.16	47,606
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.73	1.55	2.45	21.3	0.08	0.04	1,408	1,408	0.04	141	141	—	7,640	7,640	0.14	0.32	0.47	7,739
Area	0.80	0.79	0.01	0.80	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.00	3.00	< 0.005	< 0.005	—	3.01
Energy	0.01	< 0.005	0.07	0.06	< 0.005	0.01	—	0.01	0.01	—	0.01	—	77.8	77.8	0.01	< 0.005	—	78.0

Water	—	—	—	—	—	—	—	—	—	—	—	5.05	0.00	5.05	0.52	0.01	—	21.7
Waste	—	—	—	—	—	—	—	—	—	—	—	11.3	0.00	11.3	1.13	0.00	—	39.7
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.06	0.06
Total	2.53	2.34	2.52	22.2	0.08	0.05	1,408	1,408	0.05	141	141	16.4	7,721	7,737	1.79	0.33	0.52	7,882

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
General Office Building	10.3	9.31	12.3	152	0.49	0.25	7,818	7,818	0.23	785	785	—	49,626	49,626	0.82	1.88	6.54	50,214
Total	10.3	9.31	12.3	152	0.49	0.25	7,818	7,818	0.23	785	785	—	49,626	49,626	0.82	1.88	6.54	50,214
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
General Office Building	9.12	8.18	13.9	97.7	0.43	0.25	7,818	7,818	0.23	785	785	—	43,724	43,724	0.83	1.95	0.17	44,327
Total	9.12	8.18	13.9	97.7	0.43	0.25	7,818	7,818	0.23	785	785	—	43,724	43,724	0.83	1.95	0.17	44,327
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
General Office Building	1.73	1.55	2.45	21.3	0.08	0.04	1,408	1,408	0.04	141	141	—	7,640	7,640	0.14	0.32	0.47	7,739
Total	1.73	1.55	2.45	21.3	0.08	0.04	1,408	1,408	0.04	141	141	—	7,640	7,640	0.14	0.32	0.47	7,739

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
General Office Building	0.04	0.02	0.39	0.33	< 0.005	0.03	—	0.03	0.03	—	0.03	—	470	470	0.04	< 0.005	—	471
Total	0.04	0.02	0.39	0.33	< 0.005	0.03	—	0.03	0.03	—	0.03	—	470	470	0.04	< 0.005	—	471
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
General Office Building	0.04	0.02	0.39	0.33	< 0.005	0.03	—	0.03	0.03	—	0.03	—	470	470	0.04	< 0.005	—	471
Total	0.04	0.02	0.39	0.33	< 0.005	0.03	—	0.03	0.03	—	0.03	—	470	470	0.04	< 0.005	—	471
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
General Office Building	0.01	< 0.005	0.07	0.06	< 0.005	0.01	—	0.01	0.01	—	0.01	—	77.8	77.8	0.01	< 0.005	—	78.0
Total	0.01	< 0.005	0.07	0.06	< 0.005	0.01	—	0.01	0.01	—	0.01	—	77.8	77.8	0.01	< 0.005	—	78.0

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	2.98	2.98	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.60	0.60	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	1.06	0.98	0.05	5.95	< 0.005	0.01	—	0.01	0.01	—	0.01	—	24.5	24.5	< 0.005	< 0.005	—	24.5
Total	4.64	4.56	0.05	5.95	< 0.005	0.01	—	0.01	0.01	—	0.01	—	24.5	24.5	< 0.005	< 0.005	—	24.5
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	2.98	2.98	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.60	0.60	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	3.58	3.58	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Consumer Product	0.54	0.54	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.11	0.11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.14	0.13	0.01	0.80	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.00	3.00	< 0.005	< 0.005	—	3.01
Total	0.80	0.79	0.01	0.80	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.00	3.00	< 0.005	< 0.005	—	3.01

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
General Office Building	—	—	—	—	—	—	—	—	—	—	—	30.5	0.00	30.5	3.13	0.07	—	131
Total	—	—	—	—	—	—	—	—	—	—	—	30.5	0.00	30.5	3.13	0.07	—	131
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

General Office Building	—	—	—	—	—	—	—	—	—	—	—	30.5	0.00	30.5	3.13	0.07	—	131
Total	—	—	—	—	—	—	—	—	—	—	—	30.5	0.00	30.5	3.13	0.07	—	131
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
General Office Building	—	—	—	—	—	—	—	—	—	—	—	5.05	0.00	5.05	0.52	0.01	—	21.7
Total	—	—	—	—	—	—	—	—	—	—	—	5.05	0.00	5.05	0.52	0.01	—	21.7

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
General Office Building	—	—	—	—	—	—	—	—	—	—	—	68.6	0.00	68.6	6.85	0.00	—	240
Total	—	—	—	—	—	—	—	—	—	—	—	68.6	0.00	68.6	6.85	0.00	—	240
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

General Office Building	—	—	—	—	—	—	—	—	—	—	—	68.6	0.00	68.6	6.85	0.00	—	240
Total	—	—	—	—	—	—	—	—	—	—	—	68.6	0.00	68.6	6.85	0.00	—	240
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
General Office Building	—	—	—	—	—	—	—	—	—	—	—	11.3	0.00	11.3	1.13	0.00	—	39.7
Total	—	—	—	—	—	—	—	—	—	—	—	11.3	0.00	11.3	1.13	0.00	—	39.7

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.33	0.33
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.33	0.33
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.33	0.33
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.33	0.33
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.06	0.06
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.06	0.06

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
General Office Building	3,419	3,419	3,419	1,248,026	69,646	69,646	69,646	25,420,733

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	205,152	68,384	41,030

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	270

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Parking Lot	599,044	0.00	0.0000	0.0000	0.00
General Office Building	5,201,620	0.00	0.0000	0.0000	1,465,662

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Parking Lot	0.00	0.00
General Office Building	15,919,781	916,739

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Parking Lot	0.00	—
General Office Building	127	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
General Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
General Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	32.8	annual days of extreme heat
Extreme Precipitation	0.00	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.19	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	4	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A

Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	4	1	1	4
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	11.6
AQ-PM	19.1
AQ-DPM	9.09
Drinking Water	30.6
Lead Risk Housing	50.8
Pesticides	90.5
Toxic Releases	7.58
Traffic	3.06
Effect Indicators	—
CleanUp Sites	74.2
Groundwater	77.9
Haz Waste Facilities/Generators	93.2
Impaired Water Bodies	100.0
Solid Waste	86.5
Sensitive Population	—
Asthma	87.6
Cardio-vascular	83.2
Low Birth Weights	26.9
Socioeconomic Factor Indicators	—
Education	82.7
Housing	51.4
Linguistic	88.8
Poverty	94.9
Unemployment	99.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	16.66880534
Employed	7.173104068
Median HI	5.299627871
Education	—
Bachelor's or higher	5.017323239
High school enrollment	16.8741178
Preschool enrollment	68.89516233
Transportation	—
Auto Access	18.40112922
Active commuting	51.10997049
Social	—
2-parent households	13.28114975
Voting	16.79712563
Neighborhood	—
Alcohol availability	70.25535737
Park access	33.85089183
Retail density	4.311561658
Supermarket access	49.58295907
Tree canopy	0.782753753
Housing	—
Homeownership	38.3036058
Housing habitability	30.96368536
Low-inc homeowner severe housing cost burden	26.76761196
Low-inc renter severe housing cost burden	52.89362248

Uncrowded housing	38.58591043
Health Outcomes	—
Insured adults	21.00603105
Arthritis	0.0
Asthma ER Admissions	30.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	41.7
Cognitively Disabled	50.3
Physically Disabled	19.5
Heart Attack ER Admissions	46.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	54.3
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0

Children	14.1
Elderly	42.0
English Speaking	18.7
Foreign-born	65.3
Outdoor Workers	5.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	85.8
Traffic Density	4.9
Traffic Access	23.0
Other Indices	—
Hardship	92.9
Other Decision Support	—
2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	82.0
Healthy Places Index Score for Project Location (b)	11.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Land use data are based on applicant-provided buildout assumptions.
Operations: Landscape Equipment	Assumed 270 summer days for desert region.
Operations: Water and Waste Water	Water data are based on applicant-provided calculations for the land use.
Operations: Road Dust	All roads used by future developments projects within the Specific Plan Area would be required to be paved. Per ICAPCD guidance a value of 85% paved is assumed in the modeling to account for the high levels of entrained dust generated from vehicle travel on paved roadways in the region.
Operations: Vehicle Data	Trip rate of 25 trips/tsf is based on SANDAG trip rate for a transit center (Bus Depot).
Characteristics: Utility Information	GHG intensity factors adjusted per RPS requirements.

Lithium Valley Operation - Phase 3 - Research and Development Detailed Report

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2.4. Operations Emissions Compared Against Thresholds

2.5. Operations Emissions by Sector, Unmitigated

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

4.3. Area Emissions by Source

4.3.1. Unmitigated

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

5.10.3. Landscape Equipment

5.11. Operational Energy Consumption

5.11.1. Unmitigated

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

5.13. Operational Waste Generation

5.13.1. Unmitigated

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

5.16.2. Process Boilers

5.17. User Defined

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

5.18.2. Sequestration

5.18.2.1. Unmitigated

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

6.2. Initial Climate Risk Scores

6.3. Adjusted Climate Risk Scores

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

7.2. Healthy Places Index Scores

7.3. Overall Health & Equity Scores

7.4. Health & Equity Measures

7.5. Evaluation Scorecard

7.6. Health & Equity Custom Measures

8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Lithium Valley Operation - Phase 3 - Research and Development
Operational Year	2050
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	4.80
Location	33.18829759139308, -115.6026869228474
County	Imperial
City	Unincorporated
Air District	Imperial County APCD
Air Basin	Salton Sea
TAZ	5600
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Research & Development	1,563	1000sqft	1,373	1,563,242	312,648	—	—	—
Parking Lot	3,126	1000sqft	71.8	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	106	99.5	79.0	841	2.55	2.10	39,604	39,606	2.00	3,977	3,979	1,561	262,683	264,244	165	14.2	73.7	272,666
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	87.9	82.8	86.8	498	2.25	1.98	39,604	39,605	1.91	3,977	3,979	1,561	232,746	234,307	165	14.6	40.8	242,804
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	85.3	80.7	62.2	496	1.79	1.52	29,409	29,411	1.44	2,953	2,955	1,561	185,314	186,876	164	11.8	50.9	194,519
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	15.6	14.7	11.4	90.5	0.33	0.28	5,367	5,367	0.26	539	539	259	30,681	30,939	27.1	1.95	8.43	32,205

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	51.4	46.5	69.3	765	2.51	1.40	39,604	39,605	1.32	3,977	3,978	—	256,195	256,195	4.13	10.5	33.8	259,473

Area	52.1	51.2	0.57	68.0	< 0.005	0.12	—	0.12	0.09	—	0.09	—	280	280	0.01	< 0.005	—	281
Energy	0.49	0.25	4.50	3.78	0.03	0.34	—	0.34	0.34	—	0.34	—	5,369	5,369	0.48	0.01	—	5,384
Water	—	—	—	—	—	—	—	—	—	—	—	1,497	0.00	1,497	154	3.65	—	6,423
Waste	—	—	—	—	—	—	—	—	—	—	—	64.0	0.00	64.0	6.40	0.00	—	224
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	39.9	39.9
Stationary	1.80	1.64	4.59	4.18	0.01	0.24	0.00	0.24	0.24	0.00	0.24	0.00	840	840	0.03	0.01	0.00	842
Total	106	99.5	79.0	841	2.55	2.10	39,604	39,606	2.00	3,977	3,979	1,561	262,683	264,244	165	14.2	73.7	272,666
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	45.6	40.9	77.7	490	2.22	1.40	39,604	39,605	1.32	3,977	3,978	—	226,537	226,537	4.16	10.9	0.88	229,891
Area	40.0	40.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.49	0.25	4.50	3.78	0.03	0.34	—	0.34	0.34	—	0.34	—	5,369	5,369	0.48	0.01	—	5,384
Water	—	—	—	—	—	—	—	—	—	—	—	1,497	0.00	1,497	154	3.65	—	6,423
Waste	—	—	—	—	—	—	—	—	—	—	—	64.0	0.00	64.0	6.40	0.00	—	224
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	39.9	39.9
Stationary	1.80	1.64	4.59	4.18	0.01	0.24	0.00	0.24	0.24	0.00	0.24	0.00	840	840	0.03	0.01	0.00	842
Total	87.9	82.8	86.8	498	2.25	1.98	39,604	39,605	1.91	3,977	3,979	1,561	232,746	234,307	165	14.6	40.8	242,804
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	35.6	32.0	56.7	441	1.76	1.05	29,409	29,410	1.00	2,953	2,954	—	179,624	179,624	3.09	8.10	11.0	182,125
Area	49.0	48.3	0.42	50.3	< 0.005	0.09	—	0.09	0.07	—	0.07	—	207	207	0.01	< 0.005	—	208
Energy	0.49	0.25	4.50	3.78	0.03	0.34	—	0.34	0.34	—	0.34	—	5,369	5,369	0.48	0.01	—	5,384
Water	—	—	—	—	—	—	—	—	—	—	—	1,497	0.00	1,497	154	3.65	—	6,423
Waste	—	—	—	—	—	—	—	—	—	—	—	64.0	0.00	64.0	6.40	0.00	—	224
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	39.9	39.9
Stationary	0.25	0.22	0.63	0.57	< 0.005	0.03	0.00	0.03	0.03	0.00	0.03	0.00	115	115	< 0.005	< 0.005	0.00	115
Total	85.3	80.7	62.2	496	1.79	1.52	29,409	29,411	1.44	2,953	2,955	1,561	185,314	186,876	164	11.8	50.9	194,519

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	6.49	5.84	10.3	80.6	0.32	0.19	5,367	5,367	0.18	539	539	—	29,739	29,739	0.51	1.34	1.82	30,153
Area	8.94	8.81	0.08	9.18	< 0.005	0.02	—	0.02	0.01	—	0.01	—	34.2	34.2	< 0.005	< 0.005	—	34.4
Energy	0.09	0.05	0.82	0.69	< 0.005	0.06	—	0.06	0.06	—	0.06	—	889	889	0.08	< 0.005	—	891
Water	—	—	—	—	—	—	—	—	—	—	—	248	0.00	248	25.4	0.60	—	1,063
Waste	—	—	—	—	—	—	—	—	—	—	—	10.6	0.00	10.6	1.06	0.00	—	37.1
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6.61	6.61
Stationary	0.05	0.04	0.11	0.10	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	19.0	19.0	< 0.005	< 0.005	0.00	19.1
Total	15.6	14.7	11.4	90.5	0.33	0.28	5,367	5,367	0.26	539	539	259	30,681	30,939	27.1	1.95	8.43	32,205

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Research & Development	51.4	46.5	69.3	765	2.51	1.40	39,604	39,605	1.32	3,977	3,978	—	256,195	256,195	4.13	10.5	33.8	259,473
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	51.4	46.5	69.3	765	2.51	1.40	39,604	39,605	1.32	3,977	3,978	—	256,195	256,195	4.13	10.5	33.8	259,473
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Research & Development	45.6	40.9	77.7	490	2.22	1.40	39,604	39,605	1.32	3,977	3,978	—	226,537	226,537	4.16	10.9	0.88	229,891
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	45.6	40.9	77.7	490	2.22	1.40	39,604	39,605	1.32	3,977	3,978	—	226,537	226,537	4.16	10.9	0.88	229,891
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Research & Development	6.49	5.84	10.3	80.6	0.32	0.19	5,367	5,367	0.18	539	539	—	29,739	29,739	0.51	1.34	1.82	30,153
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	6.49	5.84	10.3	80.6	0.32	0.19	5,367	5,367	0.18	539	539	—	29,739	29,739	0.51	1.34	1.82	30,153

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Research & Development	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Research & Development	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Research & Development	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Research & Development	0.49	0.25	4.50	3.78	0.03	0.34	—	0.34	0.34	—	0.34	—	5,369	5,369	0.48	0.01	—	5,384
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.49	0.25	4.50	3.78	0.03	0.34	—	0.34	0.34	—	0.34	—	5,369	5,369	0.48	0.01	—	5,384
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Research & Development	0.49	0.25	4.50	3.78	0.03	0.34	—	0.34	0.34	—	0.34	—	5,369	5,369	0.48	0.01	—	5,384
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.49	0.25	4.50	3.78	0.03	0.34	—	0.34	0.34	—	0.34	—	5,369	5,369	0.48	0.01	—	5,384
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Research & Development	0.09	0.05	0.82	0.69	< 0.005	0.06	—	0.06	0.06	—	0.06	—	889	889	0.08	< 0.005	—	891
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.09	0.05	0.82	0.69	< 0.005	0.06	—	0.06	0.06	—	0.06	—	889	889	0.08	< 0.005	—	891

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	33.7	33.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	6.31	6.31	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Landscape Equipment	12.1	11.2	0.57	68.0	< 0.005	0.12	—	0.12	0.09	—	0.09	—	280	280	0.01	< 0.005	—	281
Total	52.1	51.2	0.57	68.0	< 0.005	0.12	—	0.12	0.09	—	0.09	—	280	280	0.01	< 0.005	—	281
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	33.7	33.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	6.31	6.31	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	40.0	40.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	6.15	6.15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	1.15	1.15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	1.63	1.51	0.08	9.18	< 0.005	0.02	—	0.02	0.01	—	0.01	—	34.2	34.2	< 0.005	< 0.005	—	34.4
Total	8.94	8.81	0.08	9.18	< 0.005	0.02	—	0.02	0.01	—	0.01	—	34.2	34.2	< 0.005	< 0.005	—	34.4

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Research & Development	—	—	—	—	—	—	—	—	—	—	—	1,497	0.00	1,497	154	3.65	—	6,423
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1,497	0.00	1,497	154	3.65	—	6,423
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Research & Development	—	—	—	—	—	—	—	—	—	—	—	1,497	0.00	1,497	154	3.65	—	6,423
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1,497	0.00	1,497	154	3.65	—	6,423
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Research & Development	—	—	—	—	—	—	—	—	—	—	—	248	0.00	248	25.4	0.60	—	1,063
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	248	0.00	248	25.4	0.60	—	1,063

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Research & Development	—	—	—	—	—	—	—	—	—	—	—	64.0	0.00	64.0	6.40	0.00	—	224
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	64.0	0.00	64.0	6.40	0.00	—	224
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Research & Development	—	—	—	—	—	—	—	—	—	—	—	64.0	0.00	64.0	6.40	0.00	—	224
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	64.0	0.00	64.0	6.40	0.00	—	224
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Research & Development	—	—	—	—	—	—	—	—	—	—	—	10.6	0.00	10.6	1.06	0.00	—	37.1
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	10.6	0.00	10.6	1.06	0.00	—	37.1

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Research & Development	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	39.9	39.9
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	39.9	39.9
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Research & Development	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	39.9	39.9
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	39.9	39.9
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Research & Development	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6.61	6.61
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6.61	6.61

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	1.80	1.64	4.59	4.18	0.01	0.24	0.00	0.24	0.24	0.00	0.24	0.00	840	840	0.03	0.01	0.00	842
Total	1.80	1.64	4.59	4.18	0.01	0.24	0.00	0.24	0.24	0.00	0.24	0.00	840	840	0.03	0.01	0.00	842
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	1.80	1.64	4.59	4.18	0.01	0.24	0.00	0.24	0.24	0.00	0.24	0.00	840	840	0.03	0.01	0.00	842
Total	1.80	1.64	4.59	4.18	0.01	0.24	0.00	0.24	0.24	0.00	0.24	0.00	840	840	0.03	0.01	0.00	842
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Emergency Generat	0.05	0.04	0.11	0.10	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	19.0	19.0	< 0.005	< 0.005	0.00	19.1
Total	0.05	0.04	0.11	0.10	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	19.0	19.0	< 0.005	< 0.005	0.00	19.1

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Research & Development	17,321	2,923	1,704	4,757,036	352,802	59,543	34,707	96,894,871
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	2,344,863	781,621	187,589

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	270

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)

Research & Development	59,453,942	0.00	0.0000	0.0000	16,752,353
Parking Lot	2,738,796	0.00	0.0000	0.0000	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Research & Development	781,432,236	6,506,418
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Research & Development	119	—
Parking Lot	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Research & Development	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Research & Development	Household refrigerators and/or freezers	R-134a	1,430	0.45	0.60	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
Emergency Generator	Diesel	2.00	1.00	50.0	500	0.73

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	32.8	annual days of extreme heat
Extreme Precipitation	0.00	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.19	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A

Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	11.6
AQ-PM	19.1
AQ-DPM	9.09
Drinking Water	30.6
Lead Risk Housing	50.8
Pesticides	90.5
Toxic Releases	7.58
Traffic	3.06
Effect Indicators	—
CleanUp Sites	74.2
Groundwater	77.9
Haz Waste Facilities/Generators	93.2
Impaired Water Bodies	100.0
Solid Waste	86.5
Sensitive Population	—
Asthma	87.6
Cardio-vascular	83.2
Low Birth Weights	26.9
Socioeconomic Factor Indicators	—
Education	82.7
Housing	51.4
Linguistic	88.8
Poverty	94.9
Unemployment	99.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	16.66880534
Employed	7.173104068
Median HI	5.299627871
Education	—
Bachelor's or higher	5.017323239
High school enrollment	16.8741178
Preschool enrollment	68.89516233
Transportation	—
Auto Access	18.40112922
Active commuting	51.10997049
Social	—
2-parent households	13.28114975
Voting	16.79712563
Neighborhood	—
Alcohol availability	70.25535737
Park access	33.85089183
Retail density	4.311561658
Supermarket access	49.58295907
Tree canopy	0.782753753
Housing	—
Homeownership	38.3036058
Housing habitability	30.96368536
Low-inc homeowner severe housing cost burden	26.76761196
Low-inc renter severe housing cost burden	52.89362248

Uncrowded housing	38.58591043
Health Outcomes	—
Insured adults	21.00603105
Arthritis	0.0
Asthma ER Admissions	30.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	41.7
Cognitively Disabled	50.3
Physically Disabled	19.5
Heart Attack ER Admissions	46.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	54.3
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0

Children	14.1
Elderly	42.0
English Speaking	18.7
Foreign-born	65.3
Outdoor Workers	5.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	85.8
Traffic Density	4.9
Traffic Access	23.0
Other Indices	—
Hardship	92.9
Other Decision Support	—
2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	82.0
Healthy Places Index Score for Project Location (b)	11.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Land use data are based on applicant-provided buildout assumptions.
Operations: Vehicle Data	Trip rates are based on ITE Land Use Code 760.
Operations: Landscape Equipment	Assumed 270 summer days for desert region.
Operations: Road Dust	All roads used by future developments projects within the Specific Plan Area would be required to be paved. Per ICAPCD guidance a value of 85% paved is assumed in the modeling to account for the high levels of entrained dust generated from vehicle travel on paved roadways in the region.
Operations: Water and Waste Water	Water data are based on applicant-provided calculations for the land use.
Operations: Emergency Generators and Fire Pumps	Assumed 2 back-up generators each operating 1 hour/day and 50 hours/year for maintenance and testing.
Characteristics: Utility Information	GHG intensity factors adjusted per RPS requirements.

Lithium Valley Operation - Phase 3 - Solar Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Lithium Valley Operation - Phase 3 - Solar
Operational Year	2050
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	4.80
Location	33.18829759139308, -115.6026869228474
County	Imperial
City	Unincorporated
Air District	Imperial County APCD
Air Basin	Salton Sea
TAZ	5600
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
General Heavy Industry	618	1000sqft	294	618,129	123,626	—	—	—
Parking Lot	1,236	1000sqft	28.4	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	22.4	21.9	4.82	31.2	0.01	0.29	5.39	5.68	0.28	0.54	0.82	413	985	1,398	41.3	0.01	866	3,300
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	17.6	17.5	4.60	4.25	0.01	0.24	5.39	5.63	0.24	0.54	0.78	413	870	1,283	41.3	0.01	866	3,185
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	19.6	19.3	0.80	20.5	< 0.005	0.07	3.80	3.87	0.06	0.38	0.44	413	220	633	41.3	< 0.005	866	2,532
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.58	3.53	0.15	3.74	< 0.005	0.01	0.69	0.71	0.01	0.07	0.08	68.4	36.4	105	6.84	< 0.005	143	419

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.01	0.01	0.01	0.10	< 0.005	< 0.005	5.39	5.39	< 0.005	0.54	0.54	—	34.8	34.8	< 0.005	< 0.005	< 0.005	35.2

Area	20.6	20.2	0.23	26.9	< 0.005	0.05	—	0.05	0.04	—	0.04	—	111	111	< 0.005	< 0.005	—	111
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	413	0.00	413	41.3	0.00	—	1,445
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	866	866
Stationary	1.80	1.64	4.59	4.18	0.01	0.24	0.00	0.24	0.24	0.00	0.24	0.00	840	840	0.03	0.01	0.00	842
Total	22.4	21.9	4.82	31.2	0.01	0.29	5.39	5.68	0.28	0.54	0.82	413	985	1,398	41.3	0.01	866	3,300
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.01	0.01	0.01	0.07	< 0.005	< 0.005	5.39	5.39	< 0.005	0.54	0.54	—	30.7	30.7	< 0.005	< 0.005	< 0.005	31.2
Area	15.8	15.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	413	0.00	413	41.3	0.00	—	1,445
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	866	866
Stationary	1.80	1.64	4.59	4.18	0.01	0.24	0.00	0.24	0.24	0.00	0.24	0.00	840	840	0.03	0.01	0.00	842
Total	17.6	17.5	4.60	4.25	0.01	0.24	5.39	5.63	0.24	0.54	0.78	413	870	1,283	41.3	0.01	866	3,185
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	< 0.005	< 0.005	0.01	0.06	< 0.005	< 0.005	3.80	3.80	< 0.005	0.38	0.38	—	23.1	23.1	< 0.005	< 0.005	< 0.005	23.5
Area	19.4	19.1	0.17	19.9	< 0.005	0.04	—	0.04	0.03	—	0.03	—	81.8	81.8	< 0.005	< 0.005	—	82.1
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	413	0.00	413	41.3	0.00	—	1,445
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	866	866
Stationary	0.25	0.22	0.63	0.57	< 0.005	0.03	0.00	0.03	0.03	0.00	0.03	0.00	115	115	< 0.005	< 0.005	0.00	115
Total	19.6	19.3	0.80	20.5	< 0.005	0.07	3.80	3.87	0.06	0.38	0.44	413	220	633	41.3	< 0.005	866	2,532

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	0.69	0.69	< 0.005	0.07	0.07	—	3.83	3.83	< 0.005	< 0.005	< 0.005	3.89
Area	3.53	3.48	0.03	3.63	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	13.5	13.5	< 0.005	< 0.005	—	13.6
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	68.4	0.00	68.4	6.84	0.00	—	239
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	143	143
Stationary	0.05	0.04	0.11	0.10	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	19.0	19.0	< 0.005	< 0.005	0.00	19.1
Total	3.58	3.53	0.15	3.74	< 0.005	0.01	0.69	0.71	0.01	0.07	0.08	68.4	36.4	105	6.84	< 0.005	143	419

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Mobile source emissions results are presented in Sections 2.6. No further detailed breakdown of emissions is available.

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	13.3	13.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	2.50	2.50	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	4.79	4.42	0.23	26.9	< 0.005	0.05	—	0.05	0.04	—	0.04	—	111	111	< 0.005	< 0.005	—	111
Total	20.6	20.2	0.23	26.9	< 0.005	0.05	—	0.05	0.04	—	0.04	—	111	111	< 0.005	< 0.005	—	111

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	13.3	13.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	2.50	2.50	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	15.8	15.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	2.43	2.43	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.46	0.46	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.65	0.60	0.03	3.63	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	13.5	13.5	< 0.005	< 0.005	—	13.6
Total	3.53	3.48	0.03	3.63	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	13.5	13.5	< 0.005	< 0.005	—	13.6

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	413	0.00	413	41.3	0.00	—	1,445
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	413	0.00	413	41.3	0.00	—	1,445
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	413	0.00	413	41.3	0.00	—	1,445
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	413	0.00	413	41.3	0.00	—	1,445
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	68.4	0.00	68.4	6.84	0.00	—	239
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	68.4	0.00	68.4	6.84	0.00	—	239

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	866	866
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	866	866
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	866	866
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	866	866
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	143	143
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	143	143

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	1.80	1.64	4.59	4.18	0.01	0.24	0.00	0.24	0.24	0.00	0.24	0.00	840	840	0.03	0.01	0.00	842
Total	1.80	1.64	4.59	4.18	0.01	0.24	0.00	0.24	0.24	0.00	0.24	0.00	840	840	0.03	0.01	0.00	842
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	1.80	1.64	4.59	4.18	0.01	0.24	0.00	0.24	0.24	0.00	0.24	0.00	840	840	0.03	0.01	0.00	842
Total	1.80	1.64	4.59	4.18	0.01	0.24	0.00	0.24	0.24	0.00	0.24	0.00	840	840	0.03	0.01	0.00	842
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.05	0.04	0.11	0.10	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	19.0	19.0	< 0.005	< 0.005	0.00	19.1
Total	0.05	0.04	0.11	0.10	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	19.0	19.0	< 0.005	< 0.005	0.00	19.1

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipm Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Total all Land Uses	2.00	0.00	0.00	521	48.0	0.00	0.00	12,514

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	927,193	309,064	74,174

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	270

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
General Heavy Industry	2,190,000	0.00	0.0000	0.0000	0.00
Parking Lot	1,082,940	0.00	0.0000	0.0000	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
General Heavy Industry	0.00	256,667,546
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
General Heavy Industry	766	—
Parking Lot	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
General Heavy Industry	User Defined	User Defined	23,900	0.88	0.50	0.50	30.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
Emergency Generator	Diesel	2.00	1.00	50.0	500	0.73

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	32.8	annual days of extreme heat
Extreme Precipitation	0.00	annual days with precipitation above 20 mm

Sea Level Rise	—	meters of inundation depth
Wildfire	0.19	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A

Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	11.6
AQ-PM	19.1
AQ-DPM	9.09
Drinking Water	30.6
Lead Risk Housing	50.8
Pesticides	90.5
Toxic Releases	7.58
Traffic	3.06
Effect Indicators	—

CleanUp Sites	74.2
Groundwater	77.9
Haz Waste Facilities/Generators	93.2
Impaired Water Bodies	100.0
Solid Waste	86.5
Sensitive Population	—
Asthma	87.6
Cardio-vascular	83.2
Low Birth Weights	26.9
Socioeconomic Factor Indicators	—
Education	82.7
Housing	51.4
Linguistic	88.8
Poverty	94.9
Unemployment	99.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	16.66880534
Employed	7.173104068
Median HI	5.299627871
Education	—
Bachelor's or higher	5.017323239
High school enrollment	16.8741178
Preschool enrollment	68.89516233
Transportation	—

Auto Access	18.40112922
Active commuting	51.10997049
Social	—
2-parent households	13.28114975
Voting	16.79712563
Neighborhood	—
Alcohol availability	70.25535737
Park access	33.85089183
Retail density	4.311561658
Supermarket access	49.58295907
Tree canopy	0.782753753
Housing	—
Homeownership	38.3036058
Housing habitability	30.96368536
Low-inc homeowner severe housing cost burden	26.76761196
Low-inc renter severe housing cost burden	52.89362248
Uncrowded housing	38.58591043
Health Outcomes	—
Insured adults	21.00603105
Arthritis	0.0
Asthma ER Admissions	30.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	41.7

Cognitively Disabled	50.3
Physically Disabled	19.5
Heart Attack ER Admissions	46.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	54.3
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	14.1
Elderly	42.0
English Speaking	18.7
Foreign-born	65.3
Outdoor Workers	5.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	85.8
Traffic Density	4.9
Traffic Access	23.0
Other Indices	—
Hardship	92.9
Other Decision Support	—

2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	82.0
Healthy Places Index Score for Project Location (b)	11.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Land use data are based on applicant-provided buildout assumptions.
Operations: Road Dust	All roads used by future developments projects within the Specific Plan Area would be required to be paved. Per ICAPCD guidance a value of 85% paved is assumed in the modeling to account for the high levels of entrained dust generated from vehicle travel on paved roadways in the region.
Operations: Energy Use	Electricity consumption assumed to include system auxiliary energy consumption (2%), based on an assumed capacity of 75 MW system, operating 4 hours/day and 365 days/year.

Operations: Water and Waste Water	Water data are based on applicant-provided calculations for the land use. Outdoor water use would include annual panel washing and other infrequent activities. No indoor water use anticipated.
Operations: Refrigerants	SF6 usage anticipated for breakers/inverters. Assumed 1200 pounds of SF6 across the site.
Operations: Landscape Equipment	Assumed 270 summer days for desert region.
Operations: Emergency Generators and Fire Pumps	Assumed 2 back-up generators operating 1 hour/day and 50 hours/year each for maintenance and testing.
Characteristics: Utility Information	GHG intensity factors adjusted per RPS requirements.

Lithium Valley Operation - Phase 3 - Substations Detailed Report

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2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

2.5. Operations Emissions by Sector, Unmitigated

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

4.3. Area Emissions by Source

4.3.1. Unmitigated

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

5.10.3. Landscape Equipment

5.11. Operational Energy Consumption

5.11.1. Unmitigated

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

5.13. Operational Waste Generation

5.13.1. Unmitigated

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

5.16.2. Process Boilers

5.17. User Defined

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

5.18.2. Sequestration

5.18.2.1. Unmitigated

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

6.2. Initial Climate Risk Scores

6.3. Adjusted Climate Risk Scores

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

7.2. Healthy Places Index Scores

7.3. Overall Health & Equity Scores

7.4. Health & Equity Measures

7.5. Evaluation Scorecard

7.6. Health & Equity Custom Measures

8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Lithium Valley Operation - Phase 3 - Substations
Operational Year	2050
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	4.80
Location	33.18829759139308, -115.6026869228474
County	Imperial
City	Unincorporated
Air District	Imperial County APCD
Air Basin	Salton Sea
TAZ	5600
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
General Heavy Industry	794	1000sqft	702	794,089	158,818	—	—	—
Parking Lot	1,588	1000sqft	36.5	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	26.5	26.0	0.30	34.6	< 0.005	0.06	5.39	5.45	0.05	0.54	0.59	531	177	707	53.0	< 0.005	72.2	2,107
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	20.3	20.3	0.01	0.07	< 0.005	< 0.005	5.39	5.39	< 0.005	0.54	0.54	531	30.7	561	53.0	< 0.005	72.2	1,960
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	24.9	24.5	0.22	25.6	< 0.005	0.05	3.80	3.84	0.03	0.38	0.42	531	128	659	53.0	< 0.005	72.2	2,058
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.54	4.48	0.04	4.67	< 0.005	0.01	0.69	0.70	0.01	0.07	0.08	87.9	21.2	109	8.78	< 0.005	12.0	341

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.01	0.01	0.01	0.10	< 0.005	< 0.005	5.39	5.39	< 0.005	0.54	0.54	—	34.8	34.8	< 0.005	< 0.005	< 0.005	35.2

Area	26.5	26.0	0.29	34.5	< 0.005	0.06	—	0.06	0.05	—	0.05	—	142	142	0.01	< 0.005	—	143
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	531	0.00	531	53.0	0.00	—	1,857
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	72.2	72.2
Total	26.5	26.0	0.30	34.6	< 0.005	0.06	5.39	5.45	0.05	0.54	0.59	531	177	707	53.0	< 0.005	72.2	2,107
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.01	0.01	0.01	0.07	< 0.005	< 0.005	5.39	5.39	< 0.005	0.54	0.54	—	30.7	30.7	< 0.005	< 0.005	< 0.005	31.2
Area	20.3	20.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	531	0.00	531	53.0	0.00	—	1,857
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	72.2	72.2
Total	20.3	20.3	0.01	0.07	< 0.005	< 0.005	5.39	5.39	< 0.005	0.54	0.54	531	30.7	561	53.0	< 0.005	72.2	1,960
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	< 0.005	< 0.005	0.01	0.06	< 0.005	< 0.005	3.80	3.80	< 0.005	0.38	0.38	—	23.1	23.1	< 0.005	< 0.005	< 0.005	23.5
Area	24.9	24.5	0.21	25.5	< 0.005	0.05	—	0.05	0.03	—	0.03	—	105	105	< 0.005	< 0.005	—	105
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	531	0.00	531	53.0	0.00	—	1,857
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	72.2	72.2
Total	24.9	24.5	0.22	25.6	< 0.005	0.05	3.80	3.84	0.03	0.38	0.42	531	128	659	53.0	< 0.005	72.2	2,058
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	0.69	0.69	< 0.005	0.07	0.07	—	3.83	3.83	< 0.005	< 0.005	< 0.005	3.89
Area	4.54	4.48	0.04	4.66	< 0.005	0.01	—	0.01	0.01	—	0.01	—	17.4	17.4	< 0.005	< 0.005	—	17.5
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	87.9	0.00	87.9	8.78	0.00	—	307
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	12.0	12.0
Total	4.54	4.48	0.04	4.67	< 0.005	0.01	0.69	0.70	0.01	0.07	0.08	87.9	21.2	109	8.78	< 0.005	12.0	341

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Mobile source emissions results are presented in Sections 2.6. No further detailed breakdown of emissions is available.

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	17.1	17.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	3.21	3.21	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	6.15	5.68	0.29	34.5	< 0.005	0.06	—	0.06	0.05	—	0.05	—	142	142	0.01	< 0.005	—	143
Total	26.5	26.0	0.29	34.5	< 0.005	0.06	—	0.06	0.05	—	0.05	—	142	142	0.01	< 0.005	—	143
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	17.1	17.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architect Coatings	3.21	3.21	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	20.3	20.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	3.12	3.12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.59	0.59	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.83	0.77	0.04	4.66	< 0.005	0.01	—	0.01	0.01	—	0.01	—	17.4	17.4	< 0.005	< 0.005	—	17.5
Total	4.54	4.48	0.04	4.66	< 0.005	0.01	—	0.01	0.01	—	0.01	—	17.4	17.4	< 0.005	< 0.005	—	17.5

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	531	0.00	531	53.0	0.00	—	1,857
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	531	0.00	531	53.0	0.00	—	1,857

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	531	0.00	531	53.0	0.00	—	1,857
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	531	0.00	531	53.0	0.00	—	1,857
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	87.9	0.00	87.9	8.78	0.00	—	307
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	87.9	0.00	87.9	8.78	0.00	—	307

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	72.2	72.2
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	72.2	72.2
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	72.2	72.2
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	72.2	72.2
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	12.0	12.0
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	12.0	12.0

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipm Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Remove	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Total all Land Uses	2.00	0.00	0.00	521	48.0	0.00	0.00	12,514

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	1,191,133	397,044	95,291

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	270

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
General Heavy Industry	0.00	0.00	0.0000	0.0000	0.00
Parking Lot	1,391,246	0.00	0.0000	0.0000	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
General Heavy Industry	0.00	499,742,799
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
General Heavy Industry	985	—
Parking Lot	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
General Heavy Industry	User Defined	User Defined	23,900	0.57	0.05	0.05	30.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
Emergency Generator	Diesel	1.00	1.00	50.0	500	0.73

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	32.8	annual days of extreme heat
Extreme Precipitation	0.00	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.19	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A

Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	11.6
AQ-PM	19.1
AQ-DPM	9.09
Drinking Water	30.6
Lead Risk Housing	50.8
Pesticides	90.5
Toxic Releases	7.58
Traffic	3.06
Effect Indicators	—
CleanUp Sites	74.2
Groundwater	77.9
Haz Waste Facilities/Generators	93.2
Impaired Water Bodies	100.0
Solid Waste	86.5
Sensitive Population	—
Asthma	87.6
Cardio-vascular	83.2
Low Birth Weights	26.9
Socioeconomic Factor Indicators	—
Education	82.7
Housing	51.4
Linguistic	88.8

Poverty	94.9
Unemployment	99.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	16.66880534
Employed	7.173104068
Median HI	5.299627871
Education	—
Bachelor's or higher	5.017323239
High school enrollment	16.8741178
Preschool enrollment	68.89516233
Transportation	—
Auto Access	18.40112922
Active commuting	51.10997049
Social	—
2-parent households	13.28114975
Voting	16.79712563
Neighborhood	—
Alcohol availability	70.25535737
Park access	33.85089183
Retail density	4.311561658
Supermarket access	49.58295907
Tree canopy	0.782753753
Housing	—
Homeownership	38.3036058

Housing habitability	30.96368536
Low-inc homeowner severe housing cost burden	26.76761196
Low-inc renter severe housing cost burden	52.89362248
Uncrowded housing	38.58591043
Health Outcomes	—
Insured adults	21.00603105
Arthritis	0.0
Asthma ER Admissions	30.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	41.7
Cognitively Disabled	50.3
Physically Disabled	19.5
Heart Attack ER Admissions	46.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	54.3
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0

Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	14.1
Elderly	42.0
English Speaking	18.7
Foreign-born	65.3
Outdoor Workers	5.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	85.8
Traffic Density	4.9
Traffic Access	23.0
Other Indices	—
Hardship	92.9
Other Decision Support	—
2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	82.0
Healthy Places Index Score for Project Location (b)	11.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Operations: Energy Use	Natural gas not anticipated as part of project operations. Substation uses will not themselves generate electricity.
Operations: Water and Waste Water	Water data are based on applicant-provided calculations for the land use. Indoor water not anticipated as part of operations.
Operations: Refrigerants	Assumed 1,000 lbs. of SF6 as part of project operations.
Land Use	Land use data are based on applicant-provided buildout assumptions.
Operations: Landscape Equipment	Assumed 270 summer days for desert region.
Operations: Emergency Generators and Fire Pumps	Assumed 1 back-up generator operating 1 hour/day and 50 hours/year as part of project operations.
Operations: Road Dust	All roads used by future developments projects within the Specific Plan Area would be required to be paved. Per ICAPCD guidance a value of 85% paved is assumed in the modeling to account for the high levels of entrained dust generated from vehicle travel on paved roadways in the region.
Characteristics: Utility Information	GHG intensity factors adjusted per RPS requirements.

Lithium Valley Operation - Phase 3 - Temporary Workforce Housing Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Lithium Valley Operation - Phase 3 - Temporary Workforce Housing
Operational Year	2050
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	4.80
Location	33.18829759139308, -115.6026869228474
County	Imperial
City	Unincorporated
Air District	Imperial County APCD
Air Basin	Salton Sea
TAZ	5600
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Mobile Home Park	1,895	Dwelling Unit	706	1,029,766	205,953	—	6,746	—
Parking Lot	2,060	1000sqft	47.3	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	53.3	51.3	22.3	333	0.73	0.45	11,321	11,321	0.42	1,137	1,137	1,908	73,817	75,725	195	5.92	17.0	82,382
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	41.4	40.0	23.8	147	0.64	0.40	11,321	11,321	0.38	1,137	1,137	1,908	65,057	66,965	195	6.02	7.63	73,642
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	48.7	46.9	23.0	248	0.65	0.42	10,802	10,802	0.40	1,085	1,085	1,908	66,473	68,381	195	5.87	11.4	75,017
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	8.89	8.57	4.20	45.2	0.12	0.08	1,971	1,971	0.07	198	198	316	11,005	11,321	32.3	0.97	1.89	12,420

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	17.4	16.0	21.3	225	0.72	0.40	11,321	11,321	0.38	1,137	1,137	—	73,529	73,529	1.28	3.11	9.66	74,498

Area	35.8	35.3	0.99	108	< 0.005	0.05	—	0.05	0.04	—	0.04	0.00	287	287	0.01	< 0.005	—	288
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	1,153	0.00	1,153	118	2.81	—	4,946
Waste	—	—	—	—	—	—	—	—	—	—	—	755	0.00	755	75.5	0.00	—	2,642
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	7.38	7.38
Total	53.3	51.3	22.3	333	0.73	0.45	11,321	11,321	0.42	1,137	1,137	1,908	73,817	75,725	195	5.92	17.0	82,382
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	15.4	14.0	23.8	147	0.64	0.40	11,321	11,321	0.38	1,137	1,137	—	65,057	65,057	1.30	3.21	0.25	66,047
Area	26.0	26.0	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	1,153	0.00	1,153	118	2.81	—	4,946
Waste	—	—	—	—	—	—	—	—	—	—	—	755	0.00	755	75.5	0.00	—	2,642
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	7.38	7.38
Total	41.4	40.0	23.8	147	0.64	0.40	11,321	11,321	0.38	1,137	1,137	1,908	65,057	66,965	195	6.02	7.63	73,642
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	15.4	14.1	22.3	168	0.65	0.39	10,802	10,802	0.37	1,085	1,085	—	66,260	66,260	1.23	3.06	4.03	67,208
Area	33.3	32.9	0.73	79.9	< 0.005	0.04	—	0.04	0.03	—	0.03	0.00	213	213	0.01	< 0.005	—	213
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	1,153	0.00	1,153	118	2.81	—	4,946
Waste	—	—	—	—	—	—	—	—	—	—	—	755	0.00	755	75.5	0.00	—	2,642
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	7.38	7.38
Total	48.7	46.9	23.0	248	0.65	0.42	10,802	10,802	0.40	1,085	1,085	1,908	66,473	68,381	195	5.87	11.4	75,017
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	2.82	2.57	4.07	30.6	0.12	0.07	1,971	1,971	0.07	198	198	—	10,970	10,970	0.20	0.51	0.67	11,127
Area	6.07	6.00	0.13	14.6	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	0.00	35.2	35.2	< 0.005	< 0.005	—	35.3
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Water	—	—	—	—	—	—	—	—	—	—	—	191	0.00	191	19.6	0.47	—	819
Waste	—	—	—	—	—	—	—	—	—	—	—	125	0.00	125	12.5	0.00	—	437
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.22	1.22
Total	8.89	8.57	4.20	45.2	0.12	0.08	1,971	1,971	0.07	198	198	316	11,005	11,321	32.3	0.97	1.89	12,420

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile Home Park	17.4	16.0	21.3	225	0.72	0.40	11,321	11,321	0.38	1,137	1,137	—	73,529	73,529	1.28	3.11	9.66	74,498
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	17.4	16.0	21.3	225	0.72	0.40	11,321	11,321	0.38	1,137	1,137	—	73,529	73,529	1.28	3.11	9.66	74,498
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile Home Park	15.4	14.0	23.8	147	0.64	0.40	11,321	11,321	0.38	1,137	1,137	—	65,057	65,057	1.30	3.21	0.25	66,047
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	15.4	14.0	23.8	147	0.64	0.40	11,321	11,321	0.38	1,137	1,137	—	65,057	65,057	1.30	3.21	0.25	66,047
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Mobile Home Park	2.82	2.57	4.07	30.6	0.12	0.07	1,971	1,971	0.07	198	198	—	10,970	10,970	0.20	0.51	0.67	11,127
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	2.82	2.57	4.07	30.6	0.12	0.07	1,971	1,971	0.07	198	198	—	10,970	10,970	0.20	0.51	0.67	11,127

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile Home Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile Home Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Mobile Home Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile Home Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile Home Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile Home Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	22.2	22.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	3.77	3.77	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	9.86	9.34	0.99	108	< 0.005	0.05	—	0.05	0.04	—	0.04	—	287	287	0.01	< 0.005	—	288
Total	35.8	35.3	0.99	108	< 0.005	0.05	—	0.05	0.04	—	0.04	0.00	287	287	0.01	< 0.005	—	288
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	22.2	22.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architectural	3.77	3.77	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	26.0	26.0	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	4.05	4.05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.69	0.69	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	1.33	1.26	0.13	14.6	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	35.2	35.2	< 0.005	< 0.005	—	35.3
Total	6.07	6.00	0.13	14.6	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	0.00	35.2	35.2	< 0.005	< 0.005	—	35.3

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile Home Park	—	—	—	—	—	—	—	—	—	—	—	1,153	0.00	1,153	118	2.81	—	4,946
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1,153	0.00	1,153	118	2.81	—	4,946

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile Home Park	—	—	—	—	—	—	—	—	—	—	—	1,153	0.00	1,153	118	2.81	—	4,946
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1,153	0.00	1,153	118	2.81	—	4,946
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile Home Park	—	—	—	—	—	—	—	—	—	—	—	191	0.00	191	19.6	0.47	—	819
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	191	0.00	191	19.6	0.47	—	819

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile Home Park	—	—	—	—	—	—	—	—	—	—	—	755	0.00	755	75.5	0.00	—	2,642
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	755	0.00	755	75.5	0.00	—	2,642

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile Home Park	—	—	—	—	—	—	—	—	—	—	—	755	0.00	755	75.5	0.00	—	2,642
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	755	0.00	755	75.5	0.00	—	2,642
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile Home Park	—	—	—	—	—	—	—	—	—	—	—	125	0.00	125	12.5	0.00	—	437
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	125	0.00	125	12.5	0.00	—	437

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile Home Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	7.38	7.38
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	7.38	7.38
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Mobile Home Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	7.38	7.38
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	7.38	7.38
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile Home Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.22	1.22
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.22	1.22

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipm Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Remove	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Mobile Home Park	6,443	5,931	5,458	2,273,635	100,849	92,840	85,425	35,587,914
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Mobile Home Park	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	486
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0

Pellet Wood Stoves	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
2085275.60325	695,092	0.00	0.00	123,571

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	270

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Mobile Home Park	27,262,798	0.00	0.0000	0.0000	0.00
Parking Lot	1,804,137	0.00	0.0000	0.0000	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Mobile Home Park	601,675,284	36,494,307
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Mobile Home Park	1,401	—
Parking Lot	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Mobile Home Park	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Mobile Home Park	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit

Temperature and Extreme Heat	32.8	annual days of extreme heat
Extreme Precipitation	0.00	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.19	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	11.6
AQ-PM	19.1
AQ-DPM	9.09
Drinking Water	30.6
Lead Risk Housing	50.8
Pesticides	90.5
Toxic Releases	7.58

Traffic	3.06
Effect Indicators	—
CleanUp Sites	74.2
Groundwater	77.9
Haz Waste Facilities/Generators	93.2
Impaired Water Bodies	100.0
Solid Waste	86.5
Sensitive Population	—
Asthma	87.6
Cardio-vascular	83.2
Low Birth Weights	26.9
Socioeconomic Factor Indicators	—
Education	82.7
Housing	51.4
Linguistic	88.8
Poverty	94.9
Unemployment	99.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	16.66880534
Employed	7.173104068
Median HI	5.299627871
Education	—
Bachelor's or higher	5.017323239
High school enrollment	16.8741178

Preschool enrollment	68.89516233
Transportation	—
Auto Access	18.40112922
Active commuting	51.10997049
Social	—
2-parent households	13.28114975
Voting	16.79712563
Neighborhood	—
Alcohol availability	70.25535737
Park access	33.85089183
Retail density	4.311561658
Supermarket access	49.58295907
Tree canopy	0.782753753
Housing	—
Homeownership	38.3036058
Housing habitability	30.96368536
Low-inc homeowner severe housing cost burden	26.76761196
Low-inc renter severe housing cost burden	52.89362248
Uncrowded housing	38.58591043
Health Outcomes	—
Insured adults	21.00603105
Arthritis	0.0
Asthma ER Admissions	30.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0

Diagnosed Diabetes	0.0
Life Expectancy at Birth	41.7
Cognitively Disabled	50.3
Physically Disabled	19.5
Heart Attack ER Admissions	46.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	54.3
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	14.1
Elderly	42.0
English Speaking	18.7
Foreign-born	65.3
Outdoor Workers	5.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	85.8
Traffic Density	4.9
Traffic Access	23.0
Other Indices	—

Hardship	92.9
Other Decision Support	—
2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	82.0
Healthy Places Index Score for Project Location (b)	11.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Land use data are based on applicant-provided buildout assumptions.
Operations: Landscape Equipment	Assumed 270 summer days for desert region.
Operations: Vehicle Data	Trip rates are based on ITE Land Use Code 240.

Operations: Road Dust	All roads used by future developments projects within the Specific Plan Area would be required to be paved. Per ICAPCD guidance a value of 85% paved is assumed in the modeling to account for the high levels of entrained dust generated from vehicle travel on paved roadways in the region.
Operations: Hearths	Temporary housing not anticipated to provide hearths or fireplaces.
Operations: Energy Use	Land use is not anticipated to incorporate the use of natural gas. Default natural gas consumption was converted to electricity.
Operations: Water and Waste Water	Water data are based on applicant-provided calculations for the land use.
Characteristics: Utility Information	GHG intensity factors adjusted per RPS requirements.

Lithium Valley Operation - Phase 3 - Wastewater Treatment Plant Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Lithium Valley Operation - Phase 3 - Wastewater Treatment Plant
Operational Year	2050
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	4.80
Location	33.18829759139308, -115.6026869228474
County	Imperial
City	Unincorporated
Air District	Imperial County APCD
Air Basin	Salton Sea
TAZ	5600
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
General Heavy Industry	526	1000sqft	422	525,820	105,164	—	—	—
Parking Lot	1,052	1000sqft	24.1	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	62.9	58.1	102	525	1.62	3.05	24,142	24,145	3.00	2,424	2,427	689	168,037	168,727	73.0	7.31	157	172,888
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	55.3	50.9	107	334	1.44	3.01	24,142	24,145	2.97	2,424	2,427	689	149,864	150,554	73.0	7.53	137	154,761
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	38.8	36.1	44.1	273	1.03	1.22	16,518	16,519	1.18	1,659	1,660	689	107,295	107,984	72.0	5.39	143	111,534
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	7.08	6.60	8.05	49.8	0.19	0.22	3,015	3,015	0.22	303	303	114	17,764	17,878	11.9	0.89	23.7	18,466

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	31.3	28.3	42.3	466	1.53	0.85	24,142	24,143	0.81	2,424	2,425	—	156,173	156,173	2.52	6.43	20.6	158,171

Area	17.5	17.2	0.19	22.9	< 0.005	0.04	—	0.04	0.03	—	0.03	—	94.0	94.0	< 0.005	< 0.005	—	94.4
Energy	0.50	0.25	4.59	3.85	0.03	0.35	—	0.35	0.35	—	0.35	—	5,474	5,474	0.48	0.01	—	5,489
Water	—	—	—	—	—	—	—	—	—	—	—	338	0.00	338	34.7	0.82	—	1,450
Waste	—	—	—	—	—	—	—	—	—	—	—	351	0.00	351	35.1	0.00	—	1,229
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	137	137
Stationary	13.5	12.3	55.0	31.4	0.06	1.81	0.00	1.81	1.81	0.00	1.81	0.00	6,296	6,296	0.25	0.05	0.00	6,317
Total	62.9	58.1	102	525	1.62	3.05	24,142	24,145	3.00	2,424	2,427	689	168,037	168,727	73.0	7.31	157	172,888
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	27.8	24.9	47.4	299	1.35	0.85	24,142	24,143	0.81	2,424	2,425	—	138,094	138,094	2.53	6.65	0.53	140,138
Area	13.5	13.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.50	0.25	4.59	3.85	0.03	0.35	—	0.35	0.35	—	0.35	—	5,474	5,474	0.48	0.01	—	5,489
Water	—	—	—	—	—	—	—	—	—	—	—	338	0.00	338	34.7	0.82	—	1,450
Waste	—	—	—	—	—	—	—	—	—	—	—	351	0.00	351	35.1	0.00	—	1,229
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	137	137
Stationary	13.5	12.3	55.0	31.4	0.06	1.81	0.00	1.81	1.81	0.00	1.81	0.00	6,296	6,296	0.25	0.05	0.00	6,317
Total	55.3	50.9	107	334	1.44	3.01	24,142	24,145	2.97	2,424	2,427	689	149,864	150,554	73.0	7.53	137	154,761
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	20.0	18.0	31.8	248	0.99	0.59	16,518	16,519	0.56	1,659	1,659	—	100,888	100,888	1.74	4.55	6.17	102,293
Area	16.5	16.2	0.14	16.9	< 0.005	0.03	—	0.03	0.02	—	0.02	—	69.6	69.6	< 0.005	< 0.005	—	69.8
Energy	0.50	0.25	4.59	3.85	0.03	0.35	—	0.35	0.35	—	0.35	—	5,474	5,474	0.48	0.01	—	5,489
Water	—	—	—	—	—	—	—	—	—	—	—	338	0.00	338	34.7	0.82	—	1,450
Waste	—	—	—	—	—	—	—	—	—	—	—	351	0.00	351	35.1	0.00	—	1,229
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	137	137
Stationary	1.85	1.69	7.54	4.30	0.01	0.25	0.00	0.25	0.25	0.00	0.25	0.00	863	863	0.03	0.01	0.00	865
Total	38.8	36.1	44.1	273	1.03	1.22	16,518	16,519	1.18	1,659	1,660	689	107,295	107,984	72.0	5.39	143	111,534

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	3.65	3.28	5.81	45.3	0.18	0.11	3,015	3,015	0.10	303	303	—	16,703	16,703	0.29	0.75	1.02	16,936
Area	3.01	2.96	0.03	3.09	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	11.5	11.5	< 0.005	< 0.005	—	11.6
Energy	0.09	0.05	0.84	0.70	0.01	0.06	—	0.06	0.06	—	0.06	—	906	906	0.08	< 0.005	—	909
Water	—	—	—	—	—	—	—	—	—	—	—	56.0	0.00	56.0	5.74	0.14	—	240
Waste	—	—	—	—	—	—	—	—	—	—	—	58.2	0.00	58.2	5.81	0.00	—	204
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	22.7	22.7
Stationary	0.34	0.31	1.38	0.78	< 0.005	0.05	0.00	0.05	0.05	0.00	0.05	0.00	143	143	0.01	< 0.005	0.00	143
Total	7.08	6.60	8.05	49.8	0.19	0.22	3,015	3,015	0.22	303	303	114	17,764	17,878	11.9	0.89	23.7	18,466

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	31.3	28.3	42.3	466	1.53	0.85	24,142	24,143	0.81	2,424	2,425	—	156,173	156,173	2.52	6.43	20.6	158,171
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	31.3	28.3	42.3	466	1.53	0.85	24,142	24,143	0.81	2,424	2,425	—	156,173	156,173	2.52	6.43	20.6	158,171
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	27.8	24.9	47.4	299	1.35	0.85	24,142	24,143	0.81	2,424	2,425	—	138,094	138,094	2.53	6.65	0.53	140,138
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	27.8	24.9	47.4	299	1.35	0.85	24,142	24,143	0.81	2,424	2,425	—	138,094	138,094	2.53	6.65	0.53	140,138
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	3.65	3.28	5.81	45.3	0.18	0.11	3,015	3,015	0.10	303	303	—	16,703	16,703	0.29	0.75	1.02	16,936
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	3.65	3.28	5.81	45.3	0.18	0.11	3,015	3,015	0.10	303	303	—	16,703	16,703	0.29	0.75	1.02	16,936

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.50	0.25	4.59	3.85	0.03	0.35	—	0.35	0.35	—	0.35	—	5,474	5,474	0.48	0.01	—	5,489
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.50	0.25	4.59	3.85	0.03	0.35	—	0.35	0.35	—	0.35	—	5,474	5,474	0.48	0.01	—	5,489
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.50	0.25	4.59	3.85	0.03	0.35	—	0.35	0.35	—	0.35	—	5,474	5,474	0.48	0.01	—	5,489

Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.50	0.25	4.59	3.85	0.03	0.35	—	0.35	0.35	—	0.35	—	5,474	5,474	0.48	0.01	—	5,489
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.09	0.05	0.84	0.70	0.01	0.06	—	0.06	0.06	—	0.06	—	906	906	0.08	< 0.005	—	909
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.09	0.05	0.84	0.70	0.01	0.06	—	0.06	0.06	—	0.06	—	906	906	0.08	< 0.005	—	909

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	11.3	11.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	2.12	2.12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	4.07	3.76	0.19	22.9	< 0.005	0.04	—	0.04	0.03	—	0.03	—	94.0	94.0	< 0.005	< 0.005	—	94.4
Total	17.5	17.2	0.19	22.9	< 0.005	0.04	—	0.04	0.03	—	0.03	—	94.0	94.0	< 0.005	< 0.005	—	94.4
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Consum Products	11.3	11.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	2.12	2.12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	13.5	13.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	2.07	2.07	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.39	0.39	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.55	0.51	0.03	3.09	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	11.5	11.5	< 0.005	< 0.005	—	11.6
Total	3.01	2.96	0.03	3.09	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	11.5	11.5	< 0.005	< 0.005	—	11.6

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	338	0.00	338	34.7	0.82	—	1,450

Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	338	0.00	338	34.7	0.82	—	1,450
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	338	0.00	338	34.7	0.82	—	1,450
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	338	0.00	338	34.7	0.82	—	1,450
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	56.0	0.00	56.0	5.74	0.14	—	240
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	56.0	0.00	56.0	5.74	0.14	—	240

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	351	0.00	351	35.1	0.00	—	1,229
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Total	—	—	—	—	—	—	—	—	—	—	—	351	0.00	351	35.1	0.00	—	1,229
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	351	0.00	351	35.1	0.00	—	1,229
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	351	0.00	351	35.1	0.00	—	1,229
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	58.2	0.00	58.2	5.81	0.00	—	204
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	58.2	0.00	58.2	5.81	0.00	—	204

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	137	137
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	137	137
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	137	137
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	137	137
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	22.7	22.7
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	22.7	22.7

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipm Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	13.5	12.3	55.0	31.4	0.06	1.81	0.00	1.81	1.81	0.00	1.81	0.00	6,296	6,296	0.25	0.05	0.00	6,317
Total	13.5	12.3	55.0	31.4	0.06	1.81	0.00	1.81	1.81	0.00	1.81	0.00	6,296	6,296	0.25	0.05	0.00	6,317
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	13.5	12.3	55.0	31.4	0.06	1.81	0.00	1.81	1.81	0.00	1.81	0.00	6,296	6,296	0.25	0.05	0.00	6,317
Total	13.5	12.3	55.0	31.4	0.06	1.81	0.00	1.81	1.81	0.00	1.81	0.00	6,296	6,296	0.25	0.05	0.00	6,317
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.34	0.31	1.38	0.78	< 0.005	0.05	0.00	0.05	0.05	0.00	0.05	0.00	143	143	0.01	< 0.005	0.00	143
Total	0.34	0.31	1.38	0.78	< 0.005	0.05	0.00	0.05	0.05	0.00	0.05	0.00	143	143	0.01	< 0.005	0.00	143

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Remove	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
General Heavy Industry	6,462	10,558	8,371	2,671,860	131,630	215,063	170,508	54,422,455
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	788,730	262,910	63,098

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	270

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
General Heavy Industry	15,971,481	0.00	0.0000	0.0000	17,081,054
Parking Lot	921,237	0.00	0.0000	0.0000	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
General Heavy Industry	176,381,695	3,122,604
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
General Heavy Industry	652	—
Parking Lot	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
General Heavy Industry	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
Emergency Generator	Diesel	5.00	1.00	50.0	1,500	0.73

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	32.8	annual days of extreme heat
Extreme Precipitation	0.00	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.19	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A

Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	11.6
AQ-PM	19.1
AQ-DPM	9.09
Drinking Water	30.6
Lead Risk Housing	50.8
Pesticides	90.5
Toxic Releases	7.58
Traffic	3.06
Effect Indicators	—
CleanUp Sites	74.2
Groundwater	77.9

Haz Waste Facilities/Generators	93.2
Impaired Water Bodies	100.0
Solid Waste	86.5
Sensitive Population	—
Asthma	87.6
Cardio-vascular	83.2
Low Birth Weights	26.9
Socioeconomic Factor Indicators	—
Education	82.7
Housing	51.4
Linguistic	88.8
Poverty	94.9
Unemployment	99.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	16.66880534
Employed	7.173104068
Median HI	5.299627871
Education	—
Bachelor's or higher	5.017323239
High school enrollment	16.8741178
Preschool enrollment	68.89516233
Transportation	—
Auto Access	18.40112922
Active commuting	51.10997049

Social	—
2-parent households	13.28114975
Voting	16.79712563
Neighborhood	—
Alcohol availability	70.25535737
Park access	33.85089183
Retail density	4.311561658
Supermarket access	49.58295907
Tree canopy	0.782753753
Housing	—
Homeownership	38.3036058
Housing habitability	30.96368536
Low-inc homeowner severe housing cost burden	26.76761196
Low-inc renter severe housing cost burden	52.89362248
Uncrowded housing	38.58591043
Health Outcomes	—
Insured adults	21.00603105
Arthritis	0.0
Asthma ER Admissions	30.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	41.7
Cognitively Disabled	50.3
Physically Disabled	19.5

Heart Attack ER Admissions	46.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	54.3
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	14.1
Elderly	42.0
English Speaking	18.7
Foreign-born	65.3
Outdoor Workers	5.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	85.8
Traffic Density	4.9
Traffic Access	23.0
Other Indices	—
Hardship	92.9
Other Decision Support	—
2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	82.0
Healthy Places Index Score for Project Location (b)	11.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Land use data are based on applicant-provided buildout assumptions.
Operations: Vehicle Data	Trip rates are based on ITE Land Use Code 170.
Operations: Landscape Equipment	Assumed 270 summer days for desert region.
Operations: Emergency Generators and Fire Pumps	Assumed 5 back-up generators operating 1 hour/day and 50 hours/year for maintenance and testing.
Operations: Road Dust	All roads used by future developments projects within the Specific Plan Area would be required to be paved. Per ICAPCD guidance a value of 85% paved is assumed in the modeling to account for the high levels of entrained dust generated from vehicle travel on paved roadways in the region.
Operations: Water and Waste Water	Water data are based on applicant-provided calculations for the land use.

Characteristics: Utility Information	GHG intensity factors adjusted per RPS requirements.

Lithium Valley Operation - Phase 3 - Water Storage Facility Detailed Report

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5.16.1. Emergency Generators and Fire Pumps

5.16.2. Process Boilers

5.17. User Defined

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

5.18.2. Sequestration

5.18.2.1. Unmitigated

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

6.2. Initial Climate Risk Scores

6.3. Adjusted Climate Risk Scores

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

7.2. Healthy Places Index Scores

7.3. Overall Health & Equity Scores

7.4. Health & Equity Measures

7.5. Evaluation Scorecard

7.6. Health & Equity Custom Measures

8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Lithium Valley Operation - Phase 3 - Water Storage Facility
Operational Year	2050
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	4.80
Location	33.18829759139308, -115.6026869228474
County	Imperial
City	Unincorporated
Air District	Imperial County APCD
Air Basin	Salton Sea
TAZ	5600
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Parking Lot	3,302	1000sqft	75.8	0.00	66,038	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.64	0.64	0.01	0.10	< 0.005	< 0.005	5.39	5.39	< 0.005	0.54	0.54	0.00	34.8	34.8	< 0.005	< 0.005	< 0.005	35.2
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.64	0.64	0.01	0.07	< 0.005	< 0.005	5.39	5.39	< 0.005	0.54	0.54	0.00	30.7	30.7	< 0.005	< 0.005	< 0.005	31.2
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.64	0.64	0.01	0.06	< 0.005	< 0.005	3.80	3.80	< 0.005	0.38	0.38	0.00	23.1	23.1	< 0.005	< 0.005	< 0.005	23.5
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.12	0.12	< 0.005	0.01	< 0.005	< 0.005	0.69	0.69	< 0.005	0.07	0.07	0.00	3.83	3.83	< 0.005	< 0.005	< 0.005	3.89

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.01	0.01	0.01	0.10	< 0.005	< 0.005	5.39	5.39	< 0.005	0.54	0.54	—	34.8	34.8	< 0.005	< 0.005	< 0.005	35.2

Area	0.64	0.64	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.64	0.64	0.01	0.10	< 0.005	< 0.005	5.39	5.39	< 0.005	0.54	0.54	0.00	34.8	34.8	< 0.005	< 0.005	< 0.005	35.2
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.01	0.01	0.01	0.07	< 0.005	< 0.005	5.39	5.39	< 0.005	0.54	0.54	—	30.7	30.7	< 0.005	< 0.005	< 0.005	31.2
Area	0.64	0.64	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.64	0.64	0.01	0.07	< 0.005	< 0.005	5.39	5.39	< 0.005	0.54	0.54	0.00	30.7	30.7	< 0.005	< 0.005	< 0.005	31.2
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	< 0.005	< 0.005	0.01	0.06	< 0.005	< 0.005	3.80	3.80	< 0.005	0.38	0.38	—	23.1	23.1	< 0.005	< 0.005	< 0.005	23.5
Area	0.64	0.64	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.64	0.64	0.01	0.06	< 0.005	< 0.005	3.80	3.80	< 0.005	0.38	0.38	0.00	23.1	23.1	< 0.005	< 0.005	< 0.005	23.5
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	0.69	0.69	< 0.005	0.07	0.07	—	3.83	3.83	< 0.005	< 0.005	< 0.005	3.89
Area	0.12	0.12	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.12	0.12	< 0.005	0.01	< 0.005	< 0.005	0.69	0.69	< 0.005	0.07	0.07	0.00	3.83	3.83	< 0.005	< 0.005	< 0.005	3.89

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Mobile source emissions results are presented in Sections 2.6. No further detailed breakdown of emissions is available.

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
undefined	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

undefine	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
undefined	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.26	0.26	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.38	0.38	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.64	0.64	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.26	0.26	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.38	0.38	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.64	0.64	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.05	0.05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architect Coatings	0.07	0.07	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.12	0.12	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Pumps	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Pumps	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Pumps	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Total all Land Uses	2.00	0.00	0.00	521	48.0	0.00	0.00	12,514

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	0.00	0.00	198,113

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00

Summer Days	day/yr	270

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Parking Lot	2,892,443	0.00	0.0000	0.0000	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Parking Lot	0.00	544,276,156

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Parking Lot	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Pumps	Electric	Average	12.0	8.00	500	0.74

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	32.8	annual days of extreme heat
Extreme Precipitation	0.00	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.19	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A

Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	11.6
AQ-PM	19.1
AQ-DPM	9.09
Drinking Water	30.6
Lead Risk Housing	50.8
Pesticides	90.5
Toxic Releases	7.58
Traffic	3.06
Effect Indicators	—
CleanUp Sites	74.2
Groundwater	77.9
Haz Waste Facilities/Generators	93.2
Impaired Water Bodies	100.0
Solid Waste	86.5
Sensitive Population	—
Asthma	87.6
Cardio-vascular	83.2
Low Birth Weights	26.9
Socioeconomic Factor Indicators	—
Education	82.7
Housing	51.4
Linguistic	88.8
Poverty	94.9
Unemployment	99.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	16.66880534
Employed	7.173104068
Median HI	5.299627871
Education	—
Bachelor's or higher	5.017323239
High school enrollment	16.8741178
Preschool enrollment	68.89516233
Transportation	—
Auto Access	18.40112922
Active commuting	51.10997049
Social	—
2-parent households	13.28114975
Voting	16.79712563
Neighborhood	—
Alcohol availability	70.25535737
Park access	33.85089183
Retail density	4.311561658
Supermarket access	49.58295907
Tree canopy	0.782753753
Housing	—
Homeownership	38.3036058
Housing habitability	30.96368536
Low-inc homeowner severe housing cost burden	26.76761196
Low-inc renter severe housing cost burden	52.89362248

Uncrowded housing	38.58591043
Health Outcomes	—
Insured adults	21.00603105
Arthritis	0.0
Asthma ER Admissions	30.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	41.7
Cognitively Disabled	50.3
Physically Disabled	19.5
Heart Attack ER Admissions	46.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	54.3
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0

Children	14.1
Elderly	42.0
English Speaking	18.7
Foreign-born	65.3
Outdoor Workers	5.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	85.8
Traffic Density	4.9
Traffic Access	23.0
Other Indices	—
Hardship	92.9
Other Decision Support	—
2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	82.0
Healthy Places Index Score for Project Location (b)	11.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Land use data are based on applicant-provided buildout assumptions.
Operations: Vehicle Data	Trip rates are based on ITE Land Use Code 760.
Operations: Landscape Equipment	Assumed 270 summer days for desert region.
Operations: Off-Road Equipment	Assumed pumps as part of project operations.
Operations: Road Dust	All roads used by future developments projects within the Specific Plan Area would be required to be paved. Per ICAPCD guidance a value of 85% paved is assumed in the modeling to account for the high levels of entrained dust generated from vehicle travel on paved roadways in the region.
Operations: Water and Waste Water	Water data are based on applicant-provided calculations for the land use.
Characteristics: Utility Information	GHG intensity factors adjusted per RPS requirements.

Lithium Valley Operation - Phase 3 - Wholesale Distribution Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Lithium Valley Operation - Phase 3 - Wholesale Distribution
Operational Year	2050
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	4.80
Location	33.18829759139308, -115.6026869228474
County	Imperial
City	Unincorporated
Air District	Imperial County APCD
Air Basin	Salton Sea
TAZ	5600
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Unrefrigerated Warehouse-No Rail	2,286	1000sqft	1,088	2,285,531	1,142,766	—	—	passenger vehicles

Unrefrigerated Warehouse-Rail	867	1000sqft	413	866,926	433,463	—	—	trucks
Refrigerated Warehouse-No Rail	308	1000sqft	146	307,643	153,821	—	—	passenger vehicles
Refrigerated Warehouse-Rail	249	1000sqft	118	248,673	124,337	—	—	trucks
Parking Lot	18,544	1000sqft	426	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	140	135	137	376	1.83	4.86	16,946	16,951	4.67	1,704	1,708	2,061	200,845	202,906	210	19.1	14,856	228,702
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	111	108	147	139	1.74	4.58	16,946	16,951	4.46	1,704	1,708	2,061	191,862	193,923	209	19.2	14,827	219,715
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	129	125	138	278	1.76	4.37	16,724	16,729	4.20	1,681	1,686	2,061	194,313	196,374	209	19.2	14,839	222,163
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	23.5	22.8	25.2	50.7	0.32	0.80	3,052	3,053	0.77	307	308	341	32,171	32,512	34.7	3.17	2,457	36,782

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	8.56	7.48	108	191	1.69	2.65	16,946	16,949	2.53	1,704	1,706	—	175,881	175,881	0.95	18.6	29.8	181,487
Area	126	124	1.36	161	0.01	0.29	—	0.29	0.22	—	0.22	—	663	663	0.03	0.01	—	666
Energy	2.09	1.04	19.0	15.9	0.11	1.44	—	1.44	1.44	—	1.44	—	22,621	22,621	2.00	0.04	—	22,684
Water	—	—	—	—	—	—	—	—	—	—	—	182	0.00	182	18.7	0.44	—	781
Waste	—	—	—	—	—	—	—	—	—	—	—	1,879	0.00	1,879	188	0.00	—	6,574
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	14,826	14,826
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	3.61	3.28	9.17	8.37	0.02	0.48	0.00	0.48	0.48	0.00	0.48	0.00	1,679	1,679	0.07	0.01	0.00	1,685
Total	140	135	137	376	1.83	4.86	16,946	16,951	4.67	1,704	1,708	2,061	200,845	202,906	210	19.1	14,856	228,702
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	7.77	6.73	119	114	1.61	2.65	16,946	16,949	2.53	1,704	1,706	—	167,562	167,562	0.96	18.7	0.77	173,165
Area	97.1	97.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	2.09	1.04	19.0	15.9	0.11	1.44	—	1.44	1.44	—	1.44	—	22,621	22,621	2.00	0.04	—	22,684
Water	—	—	—	—	—	—	—	—	—	—	—	182	0.00	182	18.7	0.44	—	781
Waste	—	—	—	—	—	—	—	—	—	—	—	1,879	0.00	1,879	188	0.00	—	6,574
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	14,826	14,826
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	3.61	3.28	9.17	8.37	0.02	0.48	0.00	0.48	0.48	0.00	0.48	0.00	1,679	1,679	0.07	0.01	0.00	1,685
Total	111	108	147	139	1.74	4.58	16,946	16,951	4.46	1,704	1,708	2,061	191,862	193,923	209	19.2	14,827	219,715

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	8.01	6.95	117	141	1.64	2.65	16,724	16,727	2.53	1,681	1,684	—	170,971	170,971	0.94	18.7	12.9	176,575
Area	118	117	1.00	119	0.01	0.21	—	0.21	0.16	—	0.16	—	491	491	0.02	< 0.005	—	492
Energy	2.09	1.04	19.0	15.9	0.11	1.44	—	1.44	1.44	—	1.44	—	22,621	22,621	2.00	0.04	—	22,684
Water	—	—	—	—	—	—	—	—	—	—	—	182	0.00	182	18.7	0.44	—	781
Waste	—	—	—	—	—	—	—	—	—	—	—	1,879	0.00	1,879	188	0.00	—	6,574
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	14,826	14,826
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	0.49	0.45	1.26	1.15	< 0.005	0.07	0.00	0.07	0.07	0.00	0.07	0.00	230	230	0.01	< 0.005	0.00	231
Total	129	125	138	278	1.76	4.37	16,724	16,729	4.20	1,681	1,686	2,061	194,313	196,374	209	19.2	14,839	222,163
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.46	1.27	21.4	25.8	0.30	0.48	3,052	3,053	0.46	307	307	—	28,306	28,306	0.16	3.09	2.13	29,234
Area	21.6	21.3	0.18	21.8	< 0.005	0.04	—	0.04	0.03	—	0.03	—	81.2	81.2	< 0.005	< 0.005	—	81.5
Energy	0.38	0.19	3.46	2.91	0.02	0.26	—	0.26	0.26	—	0.26	—	3,745	3,745	0.33	0.01	—	3,756
Water	—	—	—	—	—	—	—	—	—	—	—	30.2	0.00	30.2	3.09	0.07	—	129
Waste	—	—	—	—	—	—	—	—	—	—	—	311	0.00	311	31.1	0.00	—	1,088
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2,455	2,455
Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Stationary	0.09	0.08	0.23	0.21	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	38.1	38.1	< 0.005	< 0.005	0.00	38.2
Total	23.5	22.8	25.2	50.7	0.32	0.80	3,052	3,053	0.77	307	308	341	32,171	32,512	34.7	3.17	2,457	36,782

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	4.93	4.59	3.99	147	0.49	0.08	8,746	8,746	0.07	878	878	—	49,949	49,949	0.40	0.66	4.50	50,161
Unrefrigerated Warehouse-Rail	2.30	1.76	80.3	18.3	0.88	1.99	5,457	5,459	1.90	550	552	—	92,636	92,636	0.39	13.9	19.2	96,805
Refrigerated Warehouse-No Rail	0.66	0.62	0.54	19.8	0.07	0.01	1,177	1,177	0.01	118	118	—	6,723	6,723	0.05	0.09	0.61	6,752
Refrigerated Warehouse-Rail	0.66	0.51	23.0	5.26	0.25	0.57	1,565	1,566	0.55	158	158	—	26,572	26,572	0.11	3.99	5.52	27,768
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	8.56	7.48	108	191	1.69	2.65	16,946	16,949	2.53	1,704	1,706	—	175,881	175,881	0.95	18.6	29.8	181,487
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	4.38	4.06	4.50	79.8	0.42	0.08	8,746	8,746	0.07	878	878	—	42,566	42,566	0.41	0.73	0.12	42,794

Unrefrigerated	2.18	1.65	88.5	18.6	0.88	1.99	5,457	5,459	1.90	550	552	—	92,681	92,681	0.38	13.9	0.50	96,835
Refrigerated Warehouse-No Rail	0.59	0.55	0.61	10.7	0.06	0.01	1,177	1,177	0.01	118	118	—	5,730	5,730	0.06	0.10	0.02	5,760
Refrigerated Warehouse-Rail	0.62	0.47	25.4	5.34	0.25	0.57	1,565	1,566	0.55	158	158	—	26,585	26,585	0.11	3.99	0.14	27,776
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	7.77	6.73	119	114	1.61	2.65	16,946	16,949	2.53	1,704	1,706	—	167,562	167,562	0.96	18.7	0.77	173,165
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.82	0.76	0.78	18.9	0.08	0.01	1,575	1,575	0.01	158	158	—	7,550	7,550	0.07	0.12	0.32	7,586
Unrefrigerated Warehouse-Rail	0.41	0.31	15.9	3.37	0.16	0.36	983	983	0.35	99.0	99.4	—	15,340	15,340	0.06	2.30	1.37	16,029
Refrigerated Warehouse-No Rail	0.11	0.10	0.10	2.54	0.01	< 0.005	212	212	< 0.005	21.3	21.3	—	1,016	1,016	0.01	0.02	0.04	1,021
Refrigerated Warehouse-Rail	0.12	0.09	4.56	0.97	0.05	0.10	282	282	0.10	28.4	28.5	—	4,400	4,400	0.02	0.66	0.39	4,598
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	1.46	1.27	21.4	25.8	0.30	0.48	3,052	3,053	0.46	307	307	—	28,306	28,306	0.16	3.09	2.13	29,234

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Unrefrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Refrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
undefined	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unrefrigerated	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Unrefrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Refrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
undefined	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Unrefrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Refrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
undefined	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	1.29	0.64	11.7	9.84	0.07	0.89	—	0.89	0.89	—	0.89	—	13,980	13,980	1.24	0.03	—	14,019
Unrefrigerated Warehouse-Rail	0.49	0.24	4.44	3.73	0.03	0.34	—	0.34	0.34	—	0.34	—	5,303	5,303	0.47	0.01	—	5,318
Refrigerated Warehouse-No Rail	0.17	0.09	1.55	1.30	0.01	0.12	—	0.12	0.12	—	0.12	—	1,846	1,846	0.16	< 0.005	—	1,851
Refrigerated Warehouse-Rail	0.14	0.07	1.25	1.05	0.01	0.10	—	0.10	0.10	—	0.10	—	1,492	1,492	0.13	< 0.005	—	1,496
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Total	2.09	1.04	19.0	15.9	0.11	1.44	—	1.44	1.44	—	1.44	—	22,621	22,621	2.00	0.04	—	22,684
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	1.29	0.64	11.7	9.84	0.07	0.89	—	0.89	0.89	—	0.89	—	13,980	13,980	1.24	0.03	—	14,019
Unrefrigerated Warehouse-Rail	0.49	0.24	4.44	3.73	0.03	0.34	—	0.34	0.34	—	0.34	—	5,303	5,303	0.47	0.01	—	5,318
Refrigerated Warehouse-No Rail	0.17	0.09	1.55	1.30	0.01	0.12	—	0.12	0.12	—	0.12	—	1,846	1,846	0.16	< 0.005	—	1,851
Refrigerated Warehouse-Rail	0.14	0.07	1.25	1.05	0.01	0.10	—	0.10	0.10	—	0.10	—	1,492	1,492	0.13	< 0.005	—	1,496
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	2.09	1.04	19.0	15.9	0.11	1.44	—	1.44	1.44	—	1.44	—	22,621	22,621	2.00	0.04	—	22,684
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.24	0.12	2.14	1.80	0.01	0.16	—	0.16	0.16	—	0.16	—	2,315	2,315	0.20	< 0.005	—	2,321
Unrefrigerated Warehouse-Rail	0.09	0.04	0.81	0.68	< 0.005	0.06	—	0.06	0.06	—	0.06	—	878	878	0.08	< 0.005	—	880

Refrigerated Warehouse-No	0.03	0.02	0.28	0.24	< 0.005	0.02	—	0.02	0.02	—	0.02	—	306	306	0.03	< 0.005	—	306
Refrigerated Warehouse-Rail	0.03	0.01	0.23	0.19	< 0.005	0.02	—	0.02	0.02	—	0.02	—	247	247	0.02	< 0.005	—	248
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.38	0.19	3.46	2.91	0.02	0.26	—	0.26	0.26	—	0.26	—	3,745	3,745	0.33	0.01	—	3,756

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	80.8	80.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	16.3	16.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	28.7	26.5	1.36	161	0.01	0.29	—	0.29	0.22	—	0.22	—	663	663	0.03	0.01	—	666
Total	126	124	1.36	161	0.01	0.29	—	0.29	0.22	—	0.22	—	663	663	0.03	0.01	—	666
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Consum Products	80.8	80.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	16.3	16.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	97.1	97.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	14.8	14.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	2.97	2.97	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	3.88	3.58	0.18	21.8	< 0.005	0.04	—	0.04	0.03	—	0.03	—	81.2	81.2	< 0.005	< 0.005	—	81.5
Total	21.6	21.3	0.18	21.8	< 0.005	0.04	—	0.04	0.03	—	0.03	—	81.2	81.2	< 0.005	< 0.005	—	81.5

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	112	0.00	112	11.5	0.27	—	481

Unrefrig Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	42.6	0.00	42.6	4.37	0.10	—	183
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	15.1	0.00	15.1	1.55	0.04	—	64.8
Refrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	12.2	0.00	12.2	1.25	0.03	—	52.4
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	182	0.00	182	18.7	0.44	—	781
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	112	0.00	112	11.5	0.27	—	481
Unrefrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	42.6	0.00	42.6	4.37	0.10	—	183
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	15.1	0.00	15.1	1.55	0.04	—	64.8
Refrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	12.2	0.00	12.2	1.25	0.03	—	52.4
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	182	0.00	182	18.7	0.44	—	781

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	18.6	0.00	18.6	1.91	0.05	—	79.7
Unrefrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	7.05	0.00	7.05	0.72	0.02	—	30.2
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	2.50	0.00	2.50	0.26	0.01	—	10.7
Refrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	2.02	0.00	2.02	0.21	< 0.005	—	8.67
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	30.2	0.00	30.2	3.09	0.07	—	129

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	1,158	0.00	1,158	116	0.00	—	4,051

Unrefrig Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	439	0.00	439	43.9	0.00	—	1,537
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	156	0.00	156	15.6	0.00	—	545
Refrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	126	0.00	126	12.6	0.00	—	441
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1,879	0.00	1,879	188	0.00	—	6,574
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	1,158	0.00	1,158	116	0.00	—	4,051
Unrefrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	439	0.00	439	43.9	0.00	—	1,537
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	156	0.00	156	15.6	0.00	—	545
Refrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	126	0.00	126	12.6	0.00	—	441
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1,879	0.00	1,879	188	0.00	—	6,574

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	192	0.00	192	19.2	0.00	—	671
Unrefrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	72.7	0.00	72.7	7.27	0.00	—	254
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	25.8	0.00	25.8	2.58	0.00	—	90.3
Refrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	20.9	0.00	20.9	2.08	0.00	—	73.0
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	311	0.00	311	31.1	0.00	—	1,088

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8,199	8,199

Refriger Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6,627	6,627
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	14,826	14,826
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8,199	8,199
Refrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6,627	6,627
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	14,826	14,826
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,357	1,357
Refrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,097	1,097
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2,455	2,455

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Rough Terrain Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Rough Terrain Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Rough Terrain Forklifts	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Emergency	3.61	3.28	9.17	8.37	0.02	0.48	0.00	0.48	0.48	0.00	0.48	0.00	1,679	1,679	0.07	0.01	0.00	1,685
Total	3.61	3.28	9.17	8.37	0.02	0.48	0.00	0.48	0.48	0.00	0.48	0.00	1,679	1,679	0.07	0.01	0.00	1,685
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	3.61	3.28	9.17	8.37	0.02	0.48	0.00	0.48	0.48	0.00	0.48	0.00	1,679	1,679	0.07	0.01	0.00	1,685
Total	3.61	3.28	9.17	8.37	0.02	0.48	0.00	0.48	0.48	0.00	0.48	0.00	1,679	1,679	0.07	0.01	0.00	1,685
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.09	0.08	0.23	0.21	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	38.1	38.1	< 0.005	< 0.005	0.00	38.2
Total	0.09	0.08	0.23	0.21	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	38.1	38.1	< 0.005	< 0.005	0.00	38.2

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Unrefrigerated Warehouse-No Rail	3,200	3,200	3,200	1,167,906	77,926	77,926	77,926	28,442,912
Unrefrigerated Warehouse-Rail	1,214	1,214	1,214	442,999	48,548	48,548	48,548	17,719,967
Refrigerated Warehouse-No Rail	431	431	431	157,206	10,489	10,489	10,489	3,828,547
Refrigerated Warehouse-Rail	348	348	348	127,072	13,926	13,926	13,926	5,082,876
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	5,563,160	1,854,387	1,112,632

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	270

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Unrefrigerated Warehouse-No Rail	25,630,892	0.00	0.0000	0.0000	43,622,308
Unrefrigerated Warehouse-Rail	9,722,068	0.00	0.0000	0.0000	16,546,401
Refrigerated Warehouse-No Rail	6,570,827	0.00	0.0000	0.0000	5,759,941
Refrigerated Warehouse-Rail	5,311,309	0.00	0.0000	0.0000	4,655,857
Parking Lot	16,244,421	0.00	0.0000	0.0000	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Unrefrigerated Warehouse-No Rail	58,578,925	2,592,658

Unrefrigerated Warehouse-Rail	22,219,592	983,422
Refrigerated Warehouse-No Rail	7,884,985	348,983
Refrigerated Warehouse-Rail	6,373,577	282,090
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Unrefrigerated Warehouse-No Rail	2,148	—
Unrefrigerated Warehouse-Rail	815	—
Refrigerated Warehouse-No Rail	289	—
Refrigerated Warehouse-Rail	234	—
Parking Lot	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Refrigerated Warehouse-No Rail	Cold storage	R-404A	3,922	7.50	7.50	7.50	25.0
Refrigerated Warehouse-Rail	Cold storage	R-404A	3,922	7.50	7.50	7.50	25.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Forklifts	Electric	Average	445	24.0	200	0.20

Rough Terrain Forklifts	Electric	Average	13.0	24.0	200	0.40

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
Emergency Generator	Diesel	4.00	1.00	50.0	500	0.73

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	32.8	annual days of extreme heat
Extreme Precipitation	0.00	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.19	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A

Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	11.6
AQ-PM	19.1
AQ-DPM	9.09
Drinking Water	30.6
Lead Risk Housing	50.8
Pesticides	90.5
Toxic Releases	7.58
Traffic	3.06
Effect Indicators	—
CleanUp Sites	74.2
Groundwater	77.9
Haz Waste Facilities/Generators	93.2
Impaired Water Bodies	100.0
Solid Waste	86.5
Sensitive Population	—
Asthma	87.6
Cardio-vascular	83.2
Low Birth Weights	26.9
Socioeconomic Factor Indicators	—
Education	82.7
Housing	51.4
Linguistic	88.8
Poverty	94.9
Unemployment	99.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	16.66880534
Employed	7.173104068
Median HI	5.299627871
Education	—
Bachelor's or higher	5.017323239
High school enrollment	16.8741178
Preschool enrollment	68.89516233
Transportation	—
Auto Access	18.40112922
Active commuting	51.10997049
Social	—
2-parent households	13.28114975
Voting	16.79712563
Neighborhood	—
Alcohol availability	70.25535737
Park access	33.85089183
Retail density	4.311561658
Supermarket access	49.58295907
Tree canopy	0.782753753
Housing	—
Homeownership	38.3036058
Housing habitability	30.96368536
Low-inc homeowner severe housing cost burden	26.76761196
Low-inc renter severe housing cost burden	52.89362248

Uncrowded housing	38.58591043
Health Outcomes	—
Insured adults	21.00603105
Arthritis	0.0
Asthma ER Admissions	30.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	41.7
Cognitively Disabled	50.3
Physically Disabled	19.5
Heart Attack ER Admissions	46.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	54.3
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0

Children	14.1
Elderly	42.0
English Speaking	18.7
Foreign-born	65.3
Outdoor Workers	5.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	85.8
Traffic Density	4.9
Traffic Access	23.0
Other Indices	—
Hardship	92.9
Other Decision Support	—
2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	82.0
Healthy Places Index Score for Project Location (b)	11.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Land use data are based on applicant-provided buildout assumptions.
Operations: Vehicle Data	Trip rates are based on ITE Land Use Code 154.
Operations: Landscape Equipment	Assumed 270 summer days for desert region.
Operations: Off-Road Equipment	Assumed forklifts and yard trucks (modeled as rough terrain forklifts) as part of project operations.
Operations: Road Dust	All roads used by future developments projects within the Specific Plan Area would be required to be paved. Per ICAPCD guidance a value of 85% paved is assumed in the modeling to account for the high levels of entrained dust generated from vehicle travel on paved roadways in the region.
Operations: Fleet Mix	Fleet mix adjusted for passenger vehicles (no-rail land uses) and trucks (rail land uses).
Operations: Emergency Generators and Fire Pumps	Assumed 4 back-up generators operating 1 hour/day and 50 hours/year for maintenance and testing.
Operations: Water and Waste Water	Water data are based on applicant-provided calculations for the land use.
Characteristics: Utility Information	GHG intensity factors adjusted per RPS requirements.

Lithium Valley Operation - Phase 3 - Workforce Training Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Lithium Valley Operation - Phase 3 - Workforce Training
Operational Year	2050
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	4.80
Location	33.18829759139308, -115.6026869228474
County	Imperial
City	Unincorporated
Air District	Imperial County APCD
Air Basin	Salton Sea
TAZ	5600
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
General Office Building	102	1000sqft	103	102,409	20,482	—	—	—
Parking Lot	205	1000sqft	4.70	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	6.78	6.39	4.33	54.2	0.16	0.11	2,538	2,538	0.10	255	255	75.0	16,482	16,557	7.85	0.67	2.37	16,955
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	5.62	5.29	4.79	32.0	0.14	0.10	2,538	2,538	0.10	255	255	75.0	14,547	14,622	7.86	0.69	0.30	15,026
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	5.57	5.27	3.62	32.3	0.11	0.09	1,896	1,896	0.08	190	191	75.0	11,707	11,782	7.79	0.53	0.94	12,136
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.02	0.96	0.66	5.89	0.02	0.02	346	346	0.02	34.8	34.8	12.4	1,938	1,951	1.29	0.09	0.16	2,009

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	3.34	3.02	4.00	49.5	0.16	0.08	2,538	2,538	0.08	255	255	—	16,112	16,112	0.27	0.61	2.12	16,303

Area	3.41	3.35	0.04	4.45	< 0.005	0.01	—	0.01	0.01	—	0.01	—	18.3	18.3	< 0.005	< 0.005	—	18.4
Energy	0.03	0.02	0.29	0.25	< 0.005	0.02	—	0.02	0.02	—	0.02	—	352	352	0.03	< 0.005	—	353
Water	—	—	—	—	—	—	—	—	—	—	—	23.7	0.00	23.7	2.43	0.06	—	101
Waste	—	—	—	—	—	—	—	—	—	—	—	51.3	0.00	51.3	5.13	0.00	—	180
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.25	0.25
Total	6.78	6.39	4.33	54.2	0.16	0.11	2,538	2,538	0.10	255	255	75.0	16,482	16,557	7.85	0.67	2.37	16,955
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	2.96	2.66	4.50	31.7	0.14	0.08	2,538	2,538	0.08	255	255	—	14,196	14,196	0.27	0.63	0.06	14,392
Area	2.62	2.62	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.03	0.02	0.29	0.25	< 0.005	0.02	—	0.02	0.02	—	0.02	—	352	352	0.03	< 0.005	—	353
Water	—	—	—	—	—	—	—	—	—	—	—	23.7	0.00	23.7	2.43	0.06	—	101
Waste	—	—	—	—	—	—	—	—	—	—	—	51.3	0.00	51.3	5.13	0.00	—	180
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.25	0.25
Total	5.62	5.29	4.79	32.0	0.14	0.10	2,538	2,538	0.10	255	255	75.0	14,547	14,622	7.86	0.69	0.30	15,026
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	2.33	2.09	3.29	28.7	0.11	0.06	1,896	1,896	0.06	190	190	—	11,342	11,342	0.20	0.47	0.69	11,489
Area	3.21	3.16	0.03	3.29	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	13.5	13.5	< 0.005	< 0.005	—	13.6
Energy	0.03	0.02	0.29	0.25	< 0.005	0.02	—	0.02	0.02	—	0.02	—	352	352	0.03	< 0.005	—	353
Water	—	—	—	—	—	—	—	—	—	—	—	23.7	0.00	23.7	2.43	0.06	—	101
Waste	—	—	—	—	—	—	—	—	—	—	—	51.3	0.00	51.3	5.13	0.00	—	180
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.25	0.25
Total	5.57	5.27	3.62	32.3	0.11	0.09	1,896	1,896	0.08	190	191	75.0	11,707	11,782	7.79	0.53	0.94	12,136
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.42	0.38	0.60	5.24	0.02	0.01	346	346	0.01	34.8	34.8	—	1,878	1,878	0.03	0.08	0.11	1,902
Area	0.59	0.58	0.01	0.60	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.24	2.24	< 0.005	< 0.005	—	2.25
Energy	0.01	< 0.005	0.05	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	58.2	58.2	0.01	< 0.005	—	58.4

Water	—	—	—	—	—	—	—	—	—	—	—	3.92	0.00	3.92	0.40	0.01	—	16.8
Waste	—	—	—	—	—	—	—	—	—	—	—	8.50	0.00	8.50	0.85	0.00	—	29.7
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.04	0.04
Total	1.02	0.96	0.66	5.89	0.02	0.02	346	346	0.02	34.8	34.8	12.4	1,938	1,951	1.29	0.09	0.16	2,009

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	3.34	3.02	4.00	49.5	0.16	0.08	2,538	2,538	0.08	255	255	—	16,112	16,112	0.27	0.61	2.12	16,303
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	3.34	3.02	4.00	49.5	0.16	0.08	2,538	2,538	0.08	255	255	—	16,112	16,112	0.27	0.61	2.12	16,303
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	2.96	2.66	4.50	31.7	0.14	0.08	2,538	2,538	0.08	255	255	—	14,196	14,196	0.27	0.63	0.06	14,392
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	2.96	2.66	4.50	31.7	0.14	0.08	2,538	2,538	0.08	255	255	—	14,196	14,196	0.27	0.63	0.06	14,392
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Office Building	0.42	0.38	0.60	5.24	0.02	0.01	346	346	0.01	34.8	34.8	—	1,878	1,878	0.03	0.08	0.11	1,902
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.42	0.38	0.60	5.24	0.02	0.01	346	346	0.01	34.8	34.8	—	1,878	1,878	0.03	0.08	0.11	1,902

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.03	0.02	0.29	0.25	< 0.005	0.02	—	0.02	0.02	—	0.02	—	352	352	0.03	< 0.005	—	353
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.03	0.02	0.29	0.25	< 0.005	0.02	—	0.02	0.02	—	0.02	—	352	352	0.03	< 0.005	—	353
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.03	0.02	0.29	0.25	< 0.005	0.02	—	0.02	0.02	—	0.02	—	352	352	0.03	< 0.005	—	353
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.03	0.02	0.29	0.25	< 0.005	0.02	—	0.02	0.02	—	0.02	—	352	352	0.03	< 0.005	—	353
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.01	< 0.005	0.05	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	58.2	58.2	0.01	< 0.005	—	58.4

Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.01	< 0.005	0.05	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	58.2	58.2	0.01	< 0.005	—	58.4

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	2.21	2.21	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.41	0.41	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.79	0.73	0.04	4.45	< 0.005	0.01	—	0.01	0.01	—	0.01	—	18.3	18.3	< 0.005	< 0.005	—	18.4
Total	3.41	3.35	0.04	4.45	< 0.005	0.01	—	0.01	0.01	—	0.01	—	18.3	18.3	< 0.005	< 0.005	—	18.4
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	2.21	2.21	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.41	0.41	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	2.62	2.62	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.40	0.40	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.08	0.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.11	0.10	0.01	0.60	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.24	2.24	< 0.005	< 0.005	—	2.25
Total	0.59	0.58	0.01	0.60	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.24	2.24	< 0.005	< 0.005	—	2.25

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	23.7	0.00	23.7	2.43	0.06	—	101
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	23.7	0.00	23.7	2.43	0.06	—	101
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Office Building	—	—	—	—	—	—	—	—	—	—	—	23.7	0.00	23.7	2.43	0.06	—	101
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	23.7	0.00	23.7	2.43	0.06	—	101
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	3.92	0.00	3.92	0.40	0.01	—	16.8
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	3.92	0.00	3.92	0.40	0.01	—	16.8

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	51.3	0.00	51.3	5.13	0.00	—	180
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	51.3	0.00	51.3	5.13	0.00	—	180
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Office Building	—	—	—	—	—	—	—	—	—	—	—	51.3	0.00	51.3	5.13	0.00	—	180
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	51.3	0.00	51.3	5.13	0.00	—	180
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	8.50	0.00	8.50	0.85	0.00	—	29.7
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	8.50	0.00	8.50	0.85	0.00	—	29.7

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.25	0.25
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.25	0.25
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.25	0.25
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.25	0.25

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.04	0.04
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.04	0.04

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
General Office Building	1,110	252	79.9	306,727	22,612	5,131	1,627	6,247,640
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	153,614	51,205	12,284

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	270

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
General Office Building	3,894,874	0.00	0.0000	0.0000	1,097,460
Parking Lot	179,345	0.00	0.0000	0.0000	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
General Office Building	12,343,079	284,312
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
General Office Building	95.2	—
Parking Lot	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced

General Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
General Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	32.8	annual days of extreme heat
Extreme Precipitation	0.00	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.19	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	11.6
AQ-PM	19.1
AQ-DPM	9.09
Drinking Water	30.6
Lead Risk Housing	50.8
Pesticides	90.5
Toxic Releases	7.58
Traffic	3.06
Effect Indicators	—
CleanUp Sites	74.2
Groundwater	77.9
Haz Waste Facilities/Generators	93.2
Impaired Water Bodies	100.0
Solid Waste	86.5
Sensitive Population	—
Asthma	87.6
Cardio-vascular	83.2
Low Birth Weights	26.9

Socioeconomic Factor Indicators	—
Education	82.7
Housing	51.4
Linguistic	88.8
Poverty	94.9
Unemployment	99.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	16.66880534
Employed	7.173104068
Median HI	5.299627871
Education	—
Bachelor's or higher	5.017323239
High school enrollment	16.8741178
Preschool enrollment	68.89516233
Transportation	—
Auto Access	18.40112922
Active commuting	51.10997049
Social	—
2-parent households	13.28114975
Voting	16.79712563
Neighborhood	—
Alcohol availability	70.25535737
Park access	33.85089183
Retail density	4.311561658

Supermarket access	49.58295907
Tree canopy	0.782753753
Housing	—
Homeownership	38.3036058
Housing habitability	30.96368536
Low-inc homeowner severe housing cost burden	26.76761196
Low-inc renter severe housing cost burden	52.89362248
Uncrowded housing	38.58591043
Health Outcomes	—
Insured adults	21.00603105
Arthritis	0.0
Asthma ER Admissions	30.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	41.7
Cognitively Disabled	50.3
Physically Disabled	19.5
Heart Attack ER Admissions	46.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	54.3
Physical Health Not Good	0.0
Stroke	0.0

Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	14.1
Elderly	42.0
English Speaking	18.7
Foreign-born	65.3
Outdoor Workers	5.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	85.8
Traffic Density	4.9
Traffic Access	23.0
Other Indices	—
Hardship	92.9
Other Decision Support	—
2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	82.0
Healthy Places Index Score for Project Location (b)	11.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Land use data are based on applicant-provided buildout assumptions.
Operations: Landscape Equipment	Assumed 270 summer days for desert region.
Operations: Vehicle Data	Trip rates are based on ITE Land Use Code 170
Operations: Road Dust	All roads used by future developments projects within the Specific Plan Area would be required to be paved. Per ICAPCD guidance a value of 85% paved is assumed in the modeling to account for the high levels of entrained dust generated from vehicle travel on paved roadways in the region.
Operations: Water and Waste Water	Water data are based on applicant-provided calculations for the land use.
Characteristics: Utility Information	GHG intensity factors adjusted per RPS requirements.

Lithium Valley Operations - Phase 3 - Geothermal Energy Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Lithium Valley Operations - Phase 3 - Geothermal Energy
Operational Year	2050
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	4.80
Location	33.191685370393785, -115.60759423347932
County	Imperial
City	Unincorporated
Air District	Imperial County APCD
Air Basin	Salton Sea
TAZ	5600
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
General Heavy Industry	12,546	1000sqft	9,423	12,546,106	2,509,221	—	—	—
Parking Lot	25,092	1000sqft	576	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	602	578	616	1,640	3.21	20.6	40,849	40,869	20.2	4,102	4,122	22,812	329,142	351,954	2,324	46.4	3,301	427,176
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	500	483	620	809	2.88	19.6	40,849	40,868	19.5	4,102	4,121	22,812	296,300	319,112	2,324	46.7	3,267	394,405
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	443	432	130	858	1.77	4.20	27,859	27,863	3.97	2,798	2,802	22,812	180,128	202,939	2,321	42.8	3,276	276,983
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	80.8	78.8	23.7	157	0.32	0.77	5,084	5,085	0.72	511	511	3,777	29,822	33,599	384	7.09	542	45,858

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	48.5	43.5	69.0	779	2.59	1.44	40,849	40,850	1.36	4,102	4,103	—	263,767	263,767	4.10	10.7	34.9	267,097

Area	418	411	4.59	546	0.03	0.97	—	0.97	0.73	—	0.73	—	2,244	2,244	0.09	0.02	—	2,252
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	14,427	0.00	14,427	1,479	35.1	—	61,886
Waste	—	—	—	—	—	—	—	—	—	—	—	8,384	0.00	8,384	838	0.00	—	29,334
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3,266	3,266
Stationary	136	123	542	315	0.59	18.2	0.00	18.2	18.2	0.00	18.2	0.00	63,131	63,131	2.53	0.49	0.00	63,342
Total	602	578	616	1,640	3.21	20.6	40,849	40,869	20.2	4,102	4,122	22,812	329,142	351,954	2,324	46.4	3,301	427,176
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	43.2	38.4	77.6	495	2.28	1.44	40,849	40,850	1.36	4,102	4,103	—	233,169	233,169	4.10	11.1	0.90	236,577
Area	321	321	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	14,427	0.00	14,427	1,479	35.1	—	61,886
Waste	—	—	—	—	—	—	—	—	—	—	—	8,384	0.00	8,384	838	0.00	—	29,334
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3,266	3,266
Stationary	136	123	542	315	0.59	18.2	0.00	18.2	18.2	0.00	18.2	0.00	63,131	63,131	2.53	0.49	0.00	63,342
Total	500	483	620	809	2.88	19.6	40,849	40,868	19.5	4,102	4,121	22,812	296,300	319,112	2,324	46.7	3,267	394,405
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	30.9	27.6	52.0	412	1.66	0.99	27,859	27,860	0.94	2,798	2,799	—	169,820	169,820	2.81	7.57	10.4	172,155
Area	393	387	3.40	404	0.02	0.72	—	0.72	0.54	—	0.54	—	1,660	1,660	0.07	0.01	—	1,666
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	14,427	0.00	14,427	1,479	35.1	—	61,886
Waste	—	—	—	—	—	—	—	—	—	—	—	8,384	0.00	8,384	838	0.00	—	29,334
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3,266	3,266
Stationary	18.6	16.9	74.3	43.1	0.08	2.49	0.00	2.49	2.49	0.00	2.49	0.00	8,648	8,648	0.35	0.07	0.00	8,677
Total	443	432	130	858	1.77	4.20	27,859	27,863	3.97	2,798	2,802	22,812	180,128	202,939	2,321	42.8	3,276	276,983

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	5.65	5.03	9.49	75.1	0.30	0.18	5,084	5,084	0.17	511	511	—	28,116	28,116	0.47	1.25	1.72	28,502
Area	71.7	70.7	0.62	73.7	< 0.005	0.13	—	0.13	0.10	—	0.10	—	275	275	0.01	< 0.005	—	276
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	2,389	0.00	2,389	245	5.82	—	10,246
Waste	—	—	—	—	—	—	—	—	—	—	—	1,388	0.00	1,388	139	0.00	—	4,857
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	541	541
Stationary	3.39	3.08	13.6	7.87	0.01	0.45	0.00	0.45	0.45	0.00	0.45	0.00	1,432	1,432	0.06	0.01	0.00	1,437
Total	80.8	78.8	23.7	157	0.32	0.77	5,084	5,085	0.72	511	511	3,777	29,822	33,599	384	7.09	542	45,858

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	48.5	43.5	69.0	779	2.59	1.44	40,849	40,850	1.36	4,102	4,103	—	263,767	263,767	4.10	10.7	34.9	267,097
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	48.5	43.5	69.0	779	2.59	1.44	40,849	40,850	1.36	4,102	4,103	—	263,767	263,767	4.10	10.7	34.9	267,097
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	43.2	38.4	77.6	495	2.28	1.44	40,849	40,850	1.36	4,102	4,103	—	233,169	233,169	4.10	11.1	0.90	236,577
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	43.2	38.4	77.6	495	2.28	1.44	40,849	40,850	1.36	4,102	4,103	—	233,169	233,169	4.10	11.1	0.90	236,577
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	5.65	5.03	9.49	75.1	0.30	0.18	5,084	5,084	0.17	511	511	—	28,116	28,116	0.47	1.25	1.72	28,502
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	5.65	5.03	9.49	75.1	0.30	0.18	5,084	5,084	0.17	511	511	—	28,116	28,116	0.47	1.25	1.72	28,502

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	270	270	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	50.7	50.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	97.2	89.7	4.59	546	0.03	0.97	—	0.97	0.73	—	0.73	—	2,244	2,244	0.09	0.02	—	2,252
Total	418	411	4.59	546	0.03	0.97	—	0.97	0.73	—	0.73	—	2,244	2,244	0.09	0.02	—	2,252
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Consum Products	270	270	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	50.7	50.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	321	321	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	49.4	49.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	9.25	9.25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	13.1	12.1	0.62	73.7	< 0.005	0.13	—	0.13	0.10	—	0.10	—	275	275	0.01	< 0.005	—	276
Total	71.7	70.7	0.62	73.7	< 0.005	0.13	—	0.13	0.10	—	0.10	—	275	275	0.01	< 0.005	—	276

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	14,427	0.00	14,427	1,479	35.1	—	61,886

Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	14,427	0.00	14,427	1,479	35.1	—	61,886
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	14,427	0.00	14,427	1,479	35.1	—	61,886
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	14,427	0.00	14,427	1,479	35.1	—	61,886
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	2,389	0.00	2,389	245	5.82	—	10,246
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	2,389	0.00	2,389	245	5.82	—	10,246

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	8,384	0.00	8,384	838	0.00	—	29,334
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Total	—	—	—	—	—	—	—	—	—	—	—	8,384	0.00	8,384	838	0.00	—	29,334
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	8,384	0.00	8,384	838	0.00	—	29,334
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	8,384	0.00	8,384	838	0.00	—	29,334
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	1,388	0.00	1,388	139	0.00	—	4,857
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1,388	0.00	1,388	139	0.00	—	4,857

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3,266	3,266
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3,266	3,266
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3,266	3,266
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3,266	3,266
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	541	541
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	541	541

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipm Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	129	118	526	300	0.57	17.3	0.00	17.3	17.3	0.00	17.3	0.00	60,193	60,193	2.42	0.47	0.00	60,394
Fire Pump	6.31	5.74	16.1	14.6	0.03	0.84	0.00	0.84	0.84	0.00	0.84	0.00	2,938	2,938	0.12	0.02	0.00	2,948
Total	136	123	542	315	0.59	18.2	0.00	18.2	18.2	0.00	18.2	0.00	63,131	63,131	2.53	0.49	0.00	63,342
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	129	118	526	300	0.57	17.3	0.00	17.3	17.3	0.00	17.3	0.00	60,193	60,193	2.42	0.47	0.00	60,394
Fire Pump	6.31	5.74	16.1	14.6	0.03	0.84	0.00	0.84	0.84	0.00	0.84	0.00	2,938	2,938	0.12	0.02	0.00	2,948
Total	136	123	542	315	0.59	18.2	0.00	18.2	18.2	0.00	18.2	0.00	63,131	63,131	2.53	0.49	0.00	63,342
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	3.23	2.94	13.2	7.50	0.01	0.43	0.00	0.43	0.43	0.00	0.43	0.00	1,365	1,365	0.05	0.01	0.00	1,370
Fire Pump	0.16	0.14	0.40	0.37	< 0.005	0.02	0.00	0.02	0.02	0.00	0.02	0.00	66.6	66.6	< 0.005	< 0.005	0.00	66.9
Total	3.39	3.08	13.6	7.87	0.01	0.45	0.00	0.45	0.45	0.00	0.45	0.00	1,432	1,432	0.06	0.01	0.00	1,437

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipm Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
General Heavy Industry	9,410	15,432	12,170	3,892,431	221,886	363,894	286,973	91,786,958
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	18,819,160	6,273,053	1,505,533

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	270

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
General Heavy Industry	500,523,005	0.00	0.0000	0.0000	0.00
Parking Lot	21,980,776	0.00	0.0000	0.0000	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
General Heavy Industry	7,528,981,064	133,290,698
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
General Heavy Industry	15,557	—
Parking Lot	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
General Heavy Industry	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
Emergency Generator	Diesel	12.0	1.00	50.0	4,300	0.73
Emergency Generator	Diesel	6.00	1.00	50.0	3,350	0.73
Fire Pump	Diesel	7.00	1.00	50.0	500	0.73

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit

Temperature and Extreme Heat	32.8	annual days of extreme heat
Extreme Precipitation	0.00	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.19	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	11.6
AQ-PM	19.1
AQ-DPM	9.09
Drinking Water	30.6
Lead Risk Housing	50.8
Pesticides	90.5
Toxic Releases	7.58

Traffic	3.06
Effect Indicators	—
CleanUp Sites	74.2
Groundwater	77.9
Haz Waste Facilities/Generators	93.2
Impaired Water Bodies	100.0
Solid Waste	86.5
Sensitive Population	—
Asthma	87.6
Cardio-vascular	83.2
Low Birth Weights	26.9
Socioeconomic Factor Indicators	—
Education	82.7
Housing	51.4
Linguistic	88.8
Poverty	94.9
Unemployment	99.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	16.66880534
Employed	7.173104068
Median HI	5.299627871
Education	—
Bachelor's or higher	5.017323239
High school enrollment	16.8741178

Preschool enrollment	68.89516233
Transportation	—
Auto Access	18.40112922
Active commuting	51.10997049
Social	—
2-parent households	13.28114975
Voting	16.79712563
Neighborhood	—
Alcohol availability	70.25535737
Park access	33.85089183
Retail density	4.311561658
Supermarket access	49.58295907
Tree canopy	0.782753753
Housing	—
Homeownership	38.3036058
Housing habitability	30.96368536
Low-inc homeowner severe housing cost burden	26.76761196
Low-inc renter severe housing cost burden	52.89362248
Uncrowded housing	38.58591043
Health Outcomes	—
Insured adults	21.00603105
Arthritis	0.0
Asthma ER Admissions	30.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0

Diagnosed Diabetes	0.0
Life Expectancy at Birth	41.7
Cognitively Disabled	50.3
Physically Disabled	19.5
Heart Attack ER Admissions	46.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	54.3
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	14.1
Elderly	42.0
English Speaking	18.7
Foreign-born	65.3
Outdoor Workers	5.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	85.8
Traffic Density	4.9
Traffic Access	23.0
Other Indices	—

Hardship	92.9
Other Decision Support	—
2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	82.0
Healthy Places Index Score for Project Location (b)	11.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Land use data are based on applicant-provided buildout assumptions. CalEEMod limits Lot Acreage to 9,999 acres. All modeling values in this section reflect the true acreage of 11,217.
Operations: Landscape Equipment	Assumed 270 summer days for desert region.
Operations: Energy Use	Natural gas not anticipated as part of project operations.

Operations: Emergency Generators and Fire Pumps	Assumed 12 4,300 hp backup generators operating 1 hour/day and 50 hours/year each for maintenance and testing. Assumed 6 3,350 hp backup generators operating 1 hour/day and 50 hours/year each for maintenance and testing. Also assumed 7 fire pumps operating 1 hour/day and 50 hours/year eachfor maintenance and testing.
Operations: Road Dust	All roads used by future developments projects within the Specific Plan Area would be required to be paved. Per ICAPCD guidance a value of 85% paved is assumed in the modeling to account for the high levels of entrained dust generated from vehicle travel on paved roadways in the region.
Operations: Vehicle Data	Custom trip rates are provided by the applicant.
Operations: Water and Waste Water	Water data are based on applicant-provided calculations for the land use.
Characteristics: Utility Information	GHG intensity factors adjusted per RPS requirements.

Appendix C

Health Effects of Criteria Air Pollutants Memorandum

MEMORANDUM

To:	Memorandum to File
From:	Jennifer Reed; Dudek
Subject:	Health Effects from Criteria Air Pollutant Emissions Associated with the Lithium Valley Specific Plan Project
Date:	July 24, 2025

1 Purpose and Introduction

In response to the California Supreme Court's *Sierra Club v. County of Fresno* (2018) 6 Cal. 5th 502 decision (referred to herein as the Friant Ranch decision), this memorandum addresses the potential for adverse health effects related to emissions of criteria air pollutants associated with construction and operation of the proposed Golden State Natural Resources Forest Resiliency Demonstration Project (project), based on scientific information and technological methods available at the time of this memorandum's preparation. The published Friant Ranch decision (issued on December 24, 2018) addresses the need to correlate mass emission values for criteria air pollutants to specific health consequences, and contains the following direction from the California Supreme Court: "The Environmental Impact Report (EIR) must provide an adequate analysis to inform the public how its bare numbers translate to create potential adverse impacts or it must explain what the agency *does* know and why, given existing scientific constraints, it cannot translate potential health impacts further." (Italics original.) (Sierra Club v. County of Fresno 2018.)

As discussed below, at the time of this memorandum's preparation, no expert agency, including the California Air Resources Board (CARB), or the U.S. Environmental Protection Agency (EPA), have approved a quantitative method to reliably, meaningfully and consistently translate the mass emission estimates for the criteria air pollutants resulting from a proposed project to specific health effects. In April 2019, the Sacramento Metropolitan Air Quality Management District (SMAQMD) published an Interim Recommendation on implementing the Friant Ranch decision in the review and analysis of proposed projects under the California Environmental Quality Act (CEQA) in Sacramento County. In October 2020, the SMAQMD published instructions for using a health effects screening tool for projects within their 5-Air-District Region, which is summarized in Section 4, below. In 2022, the Bay Area Air District (BAAD) released health effects assessment for criteria air pollutants guidance to address the Friant Ranch case as part of their 2022 CEQA Guidelines, which is qualitative (BAAD 2022). No other California air district or other expert agency/entity has published *quantitative* guidance on how to address the Friant Ranch decision for the state.

Nonetheless, following the Supreme Court's Friant Ranch decision, some EIRs where estimated criteria air pollutant emissions exceeded applicable air district thresholds have included a quantitative analysis of potential project-generated health effects using a combination of a regional photochemical grid model (PGM) and the EPA Benefits Mapping and Analysis Program (BenMAP or BenMAP–Community Edition (CE)). The publicly available health impact assessments (HIA) typically present results in terms of an increase in health incidences and/or the increase in background health incidence for various health outcomes resulting from the project's estimated increase in

concentrations of ozone (O_3) and particulate matter with an aerodynamic diameter less than or equal to 2.5 microns ($PM_{2.5}$). To date, all of the HIAs that are publicly available that have been reviewed as part of this memorandum have concluded that the evaluated project's health effects associated with the estimated project-generated increase in concentrations of O_3 and $PM_{2.5}$ represent a small increase in incidences and a very small percent of the number of background incidences, indicating that these health impacts are negligible and potentially within the models' margin of error. A review of the publicly available HIAs in CEQA documents is provided in Section 4.

2 National and California Ambient Air Quality Standards

As discussed in Section 3.2, Air Quality, of the project's Environmental Impact Report (EIR), ambient air quality standards (AAQS) define clean air and are established to protect even the most sensitive individuals (CARB 2025a). An AAQS defines the maximum amount of a pollutant averaged over a specified period of time that can be present in outdoor air without harm to the public's health. The EPA and CARB are both authorized to set AAQS.

The Clean Air Act Amendments of 1970 instruct the EPA to set primary National AAQS (NAAQS) to protect public health, and secondary NAAQS to protect plants, forests, crops and materials from damage due to exposure to the following criteria air pollutants: O_3, nitrogen dioxide (NO_2), carbon monoxide (CO), sulfur dioxide (SO_2), particulate matter with an aerodynamic diameter less than or equal to 10 microns (PM_{10}), $PM_{2.5}$, and lead.

The federal Clean Air Act requires that the EPA reassess, at least every five years, whether adopted standards are adequate to protect public health based on current scientific evidence. The EPA is required to rely on the advice of an independent scientific panel, the Clean Air Scientific Advisory Committee. Reviewing the NAAQS is a lengthy undertaking and includes the following major phases: planning, integrated science assessment, risk/exposure assessment, policy assessment, and rulemaking (EPA 2024a). During the integrated science assessment, a comprehensive review, synthesis, and evaluation of the most policy-relevant science is conducted, including key science judgments that are important to inform the development of the risk and exposure assessments (EPA 2024a). Then, the risk/exposure assessment draws upon information and conclusions presented in the integrated science assessment to develop quantitative characterizations of exposures and associated risks to human health or the environment associated with recent air quality conditions and with air quality estimated to just meet the current or alternative standard(s) under consideration (EPA 2024a). Scientific review during policy assessment development, and the NAAQS review process in general, is thorough and extensive.

In 1959, California enacted legislation requiring the state Department of Public Health to establish AAQS and necessary controls for motor vehicle emissions (CARB 2025b). California's AAQS (CAAQS) were adopted in 1971 (CARB 2025b). The CAAQS are established for O_3, NO_2, CO, SO_2, PM_{10}, and $PM_{2.5}$, as well as hydrogen sulfide, vinyl chloride, sulfates, and visibility reducing particles.

Air quality standard setting in California commences with a critical review of all relevant peer reviewed scientific literature. The Office of Environmental Health Hazard Assessment (OEHHA) uses the review of health literature to develop a recommendation for the standard. The recommendation can be for no change or for a new standard. The review, including the OEHHA recommendation, is summarized in a document called the draft Initial Statement of Reasons (ISOR), which is released for comment by the public, and also for public peer review by the Air Quality Advisory Committee (AQAC). AQAC members are appointed by the President of the University of California for their expertise in the range of subjects covered in the ISOR, including health, exposure, air quality monitoring, atmospheric chemistry and physics, and effects on plants, trees, materials, and ecosystems. The Committee

provides written comments on the draft ISOR. CARB staff next revises the ISOR based on comments from AQAC and the public. The revised ISOR is then released for a 45-day public comment period prior to consideration by the Board of CARB at a regularly scheduled Board hearing (CARB 2025c).

Federal law requires that all states attain the NAAQS. Failure of a state to reach attainment of the NAAQS by the target date can trigger penalties, including withholding of federal highway funds (CARB 2025b). California law similarly continues to mandate CAAQS, although attainment of the NAAQS has precedence over attainment of the CAAQS (CARB 2025b).

Of importance to this memorandum, California air districts have based their thresholds of significance for CEQA purposes on the levels that scientific and factual data demonstrate that the air basin can accommodate without affecting the attainment date for the NAAQS or CAAQS. Since an AAQS is based on maximum pollutant levels in outdoor air that would not harm the public's health, and air district thresholds pertain to attainment of the AAQS, this means that the thresholds established by air districts are also protective of human health. The particular thresholds of relevance to the project are illustrated in Table 3.2-7, Criteria Air Pollutant Thresholds of Significance by California Air District, of the EIR. Because O_3 is not emitted directly, air districts have established emissions-based thresholds for O_3 precursors—volatile organic compounds (VOCs) and oxides of nitrogen (NO_x)—which are intended to serve as a surrogate for an "O_3 significance threshold" (i.e., the potential for adverse O_3 impacts to occur).

The NAAQS and CAAQS for O_3, NO_2, CO, SO_2, PM_{10}, and $PM_{2.5}$ are presented in Table 1. Hydrogen sulfide, vinyl chloride, sulfates, and visibility reducing particles are not addressed further in this evaluation because they are not routinely associated with land use development projects subject to CEQA review and are thus not presented in Table 1.[1]

[1] Ambient Air Quality Standards table is provided as Table 4.3.3 in the EIR Section 4.3, Air Quality.

Table 1. Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards[a]	National Standards[b]	
		Concentration[c]	Primary[c,d]	Secondary[c,e]
O_3	1 hour	0.09 ppm (180 µg/m³)	—	Same as primary standard[f]
	8 hours	0.070 ppm (137 µg/m³)	0.070 ppm (137 µg/m³)[f]	
NO_2[g]	1 hour	0.18 ppm (339 µg/m³)	0.100 ppm (188 µg/m³)	Same as primary standard
	Annual arithmetic mean	0.030 ppm (57 µg/m³)	0.053 ppm (100 µg/m³)	
CO	1 hour	20 ppm (23 mg/m³)	35 ppm (40 mg/m³)	None
	8 hours	9.0 ppm (10 mg/m³)	9 ppm (10 mg/m³)	
SO_2[h]	1 hour	0.25 ppm (655 µg/m³)	0.075 ppm (196 µg/m³)	—
	3 hours	—	—	0.5 ppm (1,300 µg/m³)
	24 hours	0.04 ppm (105 µg/m³)	0.14 ppm (for certain areas)[g]	—
	Annual	—	0.030 ppm (for certain areas)[g]	—
PM_{10}[i]	24 hours	50 µg/m³	150 µg/m³	Same as primary standard
	Annual arithmetic mean	20 µg/m³	—	
$PM_{2.5}$[i]	24 hours	—	35 µg/m³	Same as primary standard
	Annual arithmetic mean	12 µg/m³	9.0 µg/m³	15.0 µg/m³
Lead[j,k]	30-day average	1.5 µg/m³	—	—
	Calendar quarter	—	1.5 µg/m³ (for certain areas)[k]	Same as primary standard
	Rolling 3-month average	—	0.15 µg/m³	
Hydrogen sulfide	1 hour	0.03 ppm (42 µg/m³)	—	—
Vinyl chloride[j]	24 hours	0.01 ppm (26 µg/m³)	—	—
Sulfates	24 hours	25 µg/m³	—	—
Visibility reducing particles	8 hours (10:00 a.m. to 6:00 p.m. PST)	Insufficient amount to produce an extinction coefficient of 0.23 per kilometer due to the number of particles when the relative humidity is less than 70%	—	—

Source: CARB 2024.

Notes: O_3 = ozone; ppm = parts per million by volume; µg/m³ = micrograms per cubic meter; NO_2 = nitrogen dioxide; CO = carbon monoxide; mg/m³= milligrams per cubic meter; SO_2 = sulfur dioxide; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter; PST = Pacific Standard Time.

[a] California standards for O_3, CO, SO_2 (1-hour and 24-hour), NO_2, suspended particulate matter (PM_{10}, $PM_{2.5}$), and visibility-reducing particles are values that are not to be exceeded. All others are not to be equaled or exceeded. CAAQS are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

[b] National standards (other than O_3, NO_2, SO_2, particulate matter, and those based on annual averages or annual arithmetic mean) are not to be exceeded more than once per year. The O_3 standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over 3 years, is equal to or less than the standard. For PM_{10}, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m^3 is equal to or less than 1. For $PM_{2.5}$, the 24-hour standard is attained when 98% of the daily concentrations, averaged over 3 years, are equal to or less than the standard.

[c] Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based on a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.

[d] National primary standards: The levels of air quality necessary, with an adequate margin of safety, to protect the public health.

[e] National secondary standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

[f] On October 1, 2015, the national 8-hour O_3 primary and secondary standards were lowered from 0.075 to 0.070 ppm.

[g] To attain the national 1-hour standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 parts per billion (ppb). Note that the national 1-hour standard is in units of ppb. California standards are in units of ppm. To directly compare the national 1-hour standard to the California standards, the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.

[h] On June 2, 2010, a new 1-hour SO_2 standard was established, and the existing 24-hour and annual primary standards were revoked. To attain the national 1-hour standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO_2 national standards (24-hour and annual) remain in effect until 1 year after an area is designated for the 2010 standard, except that in areas designated nonattainment of the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.

[l] On February 7, 2024, the national annual $PM_{2.5}$ primary standard was lowered from 12.0 µg/m^3 to 9.0 µg/m^3. The existing national 24-hour $PM_{2.5}$ standards (primary and secondary) were retained at 35 µg/m^3, as was the annual secondary standard of 15 µg/m^3. The existing 24-hour PM_{10} standards (primary and secondary) of 150 µg/m^3 were also retained. The form of the annual primary and secondary standards is the annual mean averaged over 3 years.

[j] CARB has identified lead and vinyl chloride as TACs with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

[k] The national standard for lead was revised on October 15, 2008, to a rolling 3-month average. The 1978 lead standard (1.5-µg/m^3 as a quarterly average) remains in effect until 1 year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.

Pursuant to the 1990 Clean Air Act amendments, the EPA classifies air basins (or portions thereof) as "attainment" or "nonattainment" for each criteria air pollutant, based on whether the NAAQS have been achieved. Generally, if the recorded concentrations of a pollutant are lower than the standard, the area is classified as "attainment" for that pollutant. If an area exceeds the standard, the area is classified as "nonattainment" for that pollutant. If there is not enough data available to determine whether the standard is exceeded in an area, the area is designated as "unclassified" or "unclassifiable." The designation of "unclassifiable/attainment" means that the area meets the standard or is expected to be meet the standard despite a lack of monitoring data. Nonattainment areas must develop plans to attain the NAAQS. Areas that achieve the standards after a nonattainment designation are redesignated as maintenance areas and must have approved maintenance plans to ensure continued attainment of the standards. The California Clean Air Act, like its federal counterpart, called for the designation of areas as "attainment" or "nonattainment," but based on CAAQS rather than NAAQS.

Table 2 depicts the current attainment status of the Salton Sea Air Basin (SSAB) with respect to the NAAQS and CAAQS.

Table 2. Salton Sea Air Basin Attainment Classification

Pollutant	Designation/Classification	
	NAAQS	CAAQS
Ozone (O_3), 1-hour	No NAAQS	**Nonattainment**
Ozone (O_3), 8-hour	**Nonattainment–marginal**	**Nonattainment**
Nitrogen dioxide (NO_2)	Unclassifiable/attainment	Attainment
Carbon monoxide (CO)	Unclassifiable/attainment	Attainment
Sulfur dioxide (SO_2)	Unclassifiable/attainment	Attainment
Coarse particulate matter (PM_{10})	Attainment/maintenance	**Nonattainment**
Fine particulate matter ($PM_{2.5}$)	Attainment[a]	Attainment
Lead	Unclassifiable/attainment	Attainment
Hydrogen sulfide	No NAAQS	Unclassified
Sulfates	No NAAQS	Attainment
Visibility-reducing particles	No NAAQS	Unclassified
Vinyl chloride	No NAAQS	No designation

Sources: CARB 2023 (California), EPA 2025a (National).
Notes: Bold text = not in attainment; attainment = meets the standards; attainment/maintenance = achieves the standards after a nonattainment designation; nonattainment = does not meet the standards; unclassified or unclassifiable = insufficient data to classify; unclassifiable/attainment = meets the standard or is expected to be meet the standard despite a lack of monitoring data.
[a] A portion of Imperial County, within the Salton Sea Air Basin area, is designated as nonattainment for $PM_{2.5}$; however, this area does not include the Plan Area. Therefore, the area is designated as attainment.

In summary, the SSAB is designated as a nonattainment area for federal and state O_3 standards. The SSAB is also designated as a nonattainment area for the state PM_{10} standards. The SSAB is designated as unclassified or in attainment for all other criteria air pollutants.

3 Health Effects of Criteria Air Pollutants and their Precursors

Numerous scientific studies published over the past 50 years point to the harmful effects of air pollution (CARB 2025b). As explained above, the AAQS are designed to prevent these effects (CARB 2025b). The adverse health effects associated with air pollution include, but are not limited to (SCAQMD 2022):

- Premature mortality
- Cardiovascular effects
- Cancer
- Reproductive effects
- Neurological effects
- Increased respiratory illness and other morbidity (symptoms, infections, and asthma exacerbation)

The evidence linking these effects to air pollutants is derived from population-based observational and field studies (epidemiological), toxicological studies, as well as controlled laboratory studies involving human subjects and animals. There have been an increasing number of studies focusing on the mechanisms (that is, on learning how specific organs, cell types, and biomarkers are involved in the human body's response to air pollution) and specific pollutants responsible for individual effects. Yet the underlying biological pathways for these effects are not always clearly understood (SCAQMD 2022).

Although individuals inhale pollutants as a mixture under ambient conditions, the regulatory framework and the control measures developed are pollutant-specific for six major outdoor pollutants covered under Sections 108 and 109 of the Clean Air Act. This is appropriate, in that different pollutants usually differ in their sources, their times and places of occurrence, the kinds of health effects they may cause, and their overall levels of health risk. Different pollutants, from the same or different sources, oftentimes occur together. Evidence for more than additive effects has not been strong and, as a practical matter, health scientists, as well as regulatory officials, usually must deal with one pollutant at a time in adopting AAQS (SCAQMD 2022).

Health effects associated with criteria air pollutants are discussed below; the same or similar information is provided in Section 4.3.1, Existing Conditions, within Section 4.3, Air Quality, of the project's EIR.

Ozone. O_3 is a strong-smelling, pale blue, reactive, toxic chemical gas consisting of three oxygen atoms. It is a secondary pollutant formed in the atmosphere by a photochemical process involving the sun's energy and O_3 precursors. These precursors are mainly NO_x and VOCs. The maximum effects of precursor emissions on O_3 concentrations usually occur several hours after they are emitted and many miles from the source. Meteorology and terrain play major roles in O_3 formation, and ideal conditions occur during summer and early autumn on days with low wind speeds or stagnant air, warm temperatures, and cloudless skies. O_3 exists in the upper atmosphere O_3 layer (stratospheric O_3) and at the Earth's surface in the troposphere (ground-level O_3).[2] The O_3 that the EPA and CARB regulate as a criteria air pollutant is produced close to the ground level, where people live, exercise, and breathe. Ground-level O_3 is a harmful air pollutant that causes numerous adverse health effects and is thus

[2] The troposphere is the layer of the Earth's atmosphere nearest to the surface of the Earth. The troposphere extends outward about 5 miles at the poles and about 10 miles at the equator.

considered "bad" O_3. Stratospheric, or "good," O_3 occurs naturally in the upper atmosphere, where it reduces the amount of ultraviolet light (i.e., solar radiation) entering the Earth's atmosphere. Without the protection of the beneficial stratospheric O_3 layer, plant and animal life would be seriously harmed.

O_3 in the troposphere causes numerous adverse health effects; short-term exposures (lasting for a few hours) to O_3 at levels typically observed in Southern California can result in breathing pattern changes, reduction of breathing capacity, increased susceptibility to infections, inflammation of the lung tissue, and some immunological changes (EPA 2013).

Inhalation of O_3 causes inflammation and irritation of the tissues lining human airways, causing and worsening a variety of symptoms. Exposure to O_3 can reduce the volume of air that the lungs breathe in, thereby causing shortness of breath. O_3 in sufficient doses increases the permeability of lung cells, rendering them more susceptible to toxins and microorganisms. The occurrence and severity of health effects from O_3 exposure vary widely among individuals, even when the dose and the duration of exposure are the same. Research shows adults and children who spend more time outdoors participating in vigorous physical activities are at greater risk from the harmful health effects of O_3 exposure. While there are relatively few studies on the effects of O_3 on children, the available studies show that children are no more or less likely to suffer harmful effects than adults. However, there are a number of reasons why children may be more susceptible to O_3 and other pollutants. Children and teens spend nearly twice as much time outdoors and engaged in vigorous activities as adults. Children breathe more rapidly than adults and inhale more pollution per pound of their body weight than adults. Also, children are less likely than adults to notice their own symptoms and avoid harmful exposures. Further research may be able to better distinguish between health effects in children and adults. Children, adolescents, and adults who exercise or work outdoors, where O_3 concentrations are the highest, are at the greatest risk of harm from this pollutant (CARB 2022d).

A number of population groups are potentially at increased risk for O_3 exposure effects. In the ongoing review of O_3, the EPA has identified populations as having adequate evidence for increased risk from O_3 exposures include individuals with asthma, younger and older age groups, individuals with reduced intake of certain nutrients such as Vitamins C and E, and outdoor workers. There is suggestive evidence for other potential factors, such as variations in genes related to oxidative metabolism or inflammation, gender, socioeconomic status, and obesity. However further evidence is needed (SCAQMD 2022).

The adverse effects reported with short-term O_3 exposure are greater with increased activity because activity increases the breathing rate and the volume of air reaching the lungs, resulting in an increased amount of O_3 reaching the lungs. Children may be a particularly vulnerable population to air pollution effects because they spend more time outdoors, are generally more active, and have a higher specific ventilation relative to their body weight, compared to adults (SCAQMD 2022).

Volatile Organic Compounds. The primary health effects of VOCs result from the formation of O_3 and its related health effects. High levels of VOCs in the atmosphere can interfere with oxygen intake by reducing the amount of available oxygen through displacement. Carcinogenic forms of hydrocarbons, such as benzene, are considered toxic air contaminants (TACs). There are no separate health standards for VOCs as a group.

Nitrogen Dioxide. NO_2 is a brownish, highly reactive gas that is present in all urban atmospheres. The major mechanism for the formation of NO_2 in the atmosphere is the oxidation of the primary air pollutant nitric oxide (NO), which is a colorless, odorless gas. NO_x plays a major role, together with VOCs, in the atmospheric reactions that

produce O_3. NO_x is formed from fuel combustion under high temperature or pressure. In addition, NO_x is an important precursor to acid rain and may affect both terrestrial and aquatic ecosystems. The two major emissions sources are transportation and stationary fuel combustion sources such as electric utility and industrial boilers. NO_2 can irritate the lungs, cause bronchitis and pneumonia, and lower resistance to respiratory infections (EPA 2016).

A large body of health science literature Indicates that exposure to NO_2 can induce adverse health effects. The strongest health evidence, and the health basis for the ambient air quality standards for NO_2, results from controlled human exposure studies that show that NO_2 exposure can intensify responses to allergens in allergic asthmatics. In addition, a number of epidemiological studies have demonstrated associations between NO_2 exposure and premature death, cardiopulmonary effects, decreased lung function growth in children, respiratory symptoms, emergency room visits for asthma, and intensified allergic responses. Infants and children are particularly at risk because they have disproportionately higher exposure to NO_2 than adults due to their greater breathing rate for their body weight and their typically greater outdoor exposure duration. Several studies have shown that long-term NO_2 exposure during childhood, the period of rapid lung growth, can lead to smaller lungs at maturity in children with higher levels of exposure compared to children with lower exposure levels. In addition, children with asthma have a greater degree of airway responsiveness compared with adult asthmatics. In adults, the greatest risk is to people who have chronic respiratory diseases, such as asthma and chronic obstructive pulmonary disease (CARB 2022e).

Carbon Monoxide. CO is a colorless, odorless gas formed by the incomplete combustion of hydrocarbon, or fossil fuels. CO is emitted almost exclusively from motor vehicles, power plants, refineries, industrial boilers, ships, aircraft, and trains. In urban areas, automobile exhaust accounts for the majority of CO emissions. CO is a nonreactive air pollutant that dissipates relatively quickly; therefore, ambient CO concentrations generally follow the spatial and temporal distributions of vehicular traffic. CO concentrations are influenced by local meteorological conditions—primarily wind speed, topography, and atmospheric stability. CO from motor vehicle exhaust can become locally concentrated when surface-based temperature inversions are combined with calm atmospheric conditions, which is a typical situation at dusk in urban areas from November to February. The highest levels of CO typically occur during the colder months of the year, when inversion conditions are more frequent.

CO is harmful because it binds to hemoglobin in the blood, reducing the ability of blood to carry oxygen. This interferes with oxygen delivery to the body's organs. The most common effects of CO exposure are fatigue, headaches, confusion and reduced mental alertness, light-headedness, and dizziness due to inadequate oxygen delivery to the brain. For people with cardiovascular disease, short-term CO exposure can further reduce their body's already compromised ability to respond to the increased oxygen demands of exercise, exertion, or stress. Inadequate oxygen delivery to the heart muscle leads to chest pain and decreased exercise tolerance. Unborn babies whose mothers experience high levels of CO exposure during pregnancy are at risk of adverse developmental effects. Unborn babies, infants, elderly people, and people with anemia or with a history of heart or respiratory disease are most likely to experience health effects with exposure to elevated levels of CO (CARB 2022f).

Sulfur Dioxide. SO_2 is a colorless, pungent gas formed primarily from incomplete combustion of sulfur-containing fossil fuels. The main sources of SO_2 are coal and oil used in power plants and industries; as such, the highest levels of SO_2 are generally found near large industrial complexes. In recent years, SO_2 concentrations have been

reduced by the increasingly stringent controls placed on stationary source emissions of SO_2 and limits on the sulfur content of fuels.

Controlled human exposure and epidemiological studies show that children and adults with asthma are more likely to experience adverse responses with SO_2 exposure, compared with the non-asthmatic population. Effects at levels near the 1-hour standard are those of asthma exacerbation, including bronchoconstriction accompanied by symptoms of respiratory irritation such as wheezing, shortness of breath, and chest tightness, especially during exercise or physical activity. Also, exposure at elevated levels of SO_2 (above 1 parts per million [ppm]) results in increased incidence of pulmonary symptoms and disease, decreased pulmonary function, and increased risk of mortality. Older people and people with cardiovascular disease or chronic lung disease (such as bronchitis or emphysema) are most likely to experience these adverse effects (CARB 2022g).

SO_2 is of concern both because it is a direct respiratory irritant and because it contributes to the formation of sulfate and sulfuric acid in particulate matter (NRC 2005). People with asthma are of particular concern, both because they have increased baseline airflow resistance and because their SO_2-induced increase in airflow resistance is greater than in healthy people, and it increases with the severity of their asthma (NRC 2005). SO_2 is thought to induce airway constriction via neural reflexes involving irritant receptors in the airways (NRC 2005).

Particulate Matter. Particulate matter pollution consists of very small liquid and solid particles floating in the air, which can include smoke, soot, dust, salts, acids, and metals. Particulate matter can form when gases emitted from industries and motor vehicles undergo chemical reactions in the atmosphere. $PM_{2.5}$ and PM_{10} represent fractions of particulate matter. Coarse particulate matter (PM_{10}) consists of particulate matter that is 10 microns or less in diameter, which is about 1/7 the thickness of a human hair. Major sources of PM_{10} include crushing or grinding operations; dust stirred up by vehicles traveling on roads; wood-burning stoves and fireplaces; dust from construction, landfills, and agriculture; wildfires and brush/waste burning; industrial sources; windblown dust from open lands; and atmospheric chemical and photochemical reactions. Fine particulate matter ($PM_{2.5}$) consists of particulate matter that is 2.5 microns or less in diameter, which is roughly 1/28 the diameter of a human hair. $PM_{2.5}$ results from fuel combustion (e.g., from motor vehicles and power generation and industrial facilities), residential fireplaces, and woodstoves. In addition, $PM_{2.5}$ can be formed in the atmosphere from gases such as sulfur oxides (SO_x), NO_x, and VOCs.

$PM_{2.5}$ and PM_{10} pose a greater health risk than larger-size particles. When inhaled, these tiny particles can penetrate the human respiratory system's natural defenses and damage the respiratory tract. $PM_{2.5}$ and PM_{10} can increase the number and severity of asthma attacks, cause or aggravate bronchitis and other lung diseases, and reduce the body's ability to fight infections. Very small particles of substances such as lead, sulfates, and nitrates can cause lung damage directly or be absorbed into the bloodstream, causing damage elsewhere in the body. Additionally, these substances can transport adsorbed gases such as chlorides or ammonium into the lungs, also causing injury. Whereas PM_{10} tends to collect in the upper portion of the respiratory system, $PM_{2.5}$ is so tiny that it can penetrate deeper into the lungs and damage lung tissue. Suspended particulates also damage and discolor surfaces on which they settle and produce haze and reduce regional visibility.

Several adverse health effects have been associated with exposure to both $PM_{2.5}$ and PM_{10}. For $PM_{2.5}$, short-term exposures (up to 24-hour duration) have been associated with premature mortality, increased hospital admissions for heart or lung causes, acute and chronic bronchitis, asthma attacks, emergency room visits, respiratory symptoms, and restricted activity days. These adverse health effects have been reported primarily in infants,

children, and older adults with preexisting heart or lung diseases. In addition, of all of the common air pollutants, $PM_{2.5}$ is associated with the greatest proportion of adverse health effects related to air pollution, both in the United States and worldwide based on the World Health Organization's Global Burden of Disease Project. Short-term exposures to PM_{10} have been associated primarily with worsening of respiratory diseases, including asthma and chronic obstructive pulmonary disease, leading to hospitalization and emergency department visits (CARB 2022f).

Long-term exposure (months to years) to $PM_{2.5}$ has been linked to premature death, particularly in people who have chronic heart or lung diseases, and reduced lung function growth in children. The effects of long-term exposure to PM_{10} are less clear, although several studies suggest a link between long-term PM_{10} exposure and respiratory mortality. The International Agency for Research on Cancer published a review in 2015 that concluded that particulate matter in outdoor air pollution causes lung cancer (CARB 2022h).

People with influenza, people with chronic respiratory and cardiovascular diseases, and older adults may suffer worsening illness and premature death as a result of breathing PM. People with bronchitis can expect aggravated symptoms from breathing PM. Children may experience a decline in lung function due to breathing in PM_{10} and $PM_{2.5}$ (EPA 2009).

PM encompasses a physically and chemically diverse class of ambient air pollutants of both anthropogenic and biological origin. The PM standard is the only NAAQS that does not target a specific chemical or family of chemical species (NRC 2005). The range of human health effects associated with ambient PM levels or demonstrated in laboratory studies has expanded from earlier concerns for total mortality and respiratory morbidity to include cardiac mortality and morbidity, blood vessel constriction, stroke, premature birth, low birth weight, retarded lung growth, enhancement of allergic responses, reduced resistance to infection, degenerative lesions in the brain, and lung cancer (EPA 2004).

4 Scientific and Technological Complexities, Guidance, and Methods

At issue in the Friant Ranch decision was the fact that a development project's environmental analysis did not connect its mass emission totals to specific adverse human health effects. Concerned with the sufficiency of the environmental analysis as an informational document, and specifically whether the magnitude of project impacts was adequately disclosed, the California Supreme Court stated the following:

> "The task for real party and the County is clear: The EIR must provide an adequate analysis to inform the public how its bare numbers translate to create potential adverse impacts or it must adequately explain what the agency *does* know and why, given existing scientific constraints, it cannot translate potential health impacts further." (Sierra Club v. County of Fresno 2018; italics original)

As discussed further below, at the time of this writing, no available modeling tools have been proven to provide a reliable and meaningful analysis to correlate an increase in mass totals or concentrations of criteria air pollutants from an individual project to specific health effects, or estimate additional pollutant nonattainment days relative to the NAAQS and CAAQS due to a single project.

Available guidance and expert opinion are summarized below and includes the San Joaquin Valley Air Pollution Control District (SJVAPCD) amicus brief, the South Coast Air Quality Management District (SCAQMD) amicus brief, the Sacramento Metropolitan quantitative guidance and tools for projects within the 5-Air-District region, the BAAD qualitative guidance, the City of Los Angeles qualitative guidance, and the Association of Environmental Professionals Climate Change Committee qualitative guidance.

Methods available are also discussed including publicly available HIAs conducted for CEQA analyses using a PGM and BenMAP, and the EPA Co-Benefits Risk Assessment (COBRA) health impacts screening and mapping tool.

Formation of Secondary Pollutants

The California Supreme Court noted, in the Friant Ranch decision, that: "The raw numbers estimating the tons per year of ROG and NO_x from the Project do not give any information to the reader about how much ozone is estimated to be produced as a result."

In response, the formation of O_3 and PM in the atmosphere, as secondary pollutants,[3] involves complex chemical and physical interactions of multiple pollutants from natural and anthropogenic sources, as further explained below. The complexity in how secondary pollutants are formed and dispersed has resulted in ongoing difficulties in measuring and regulating those pollutants.

Tropospheric, or ground level O_3, is not emitted directly into the air, but is created by chemical reactions between NO_x and VOCs (EPA 2025b). This happens when pollutants emitted by cars, power plants, industrial boilers, refineries, chemical plants, and other sources chemically react in the presence of sunlight (EPA 2025b). O_3 is most likely to reach unhealthy levels on hot sunny days in urban environments, but can still reach high levels during colder months (EPA 2025b). O_3 can also be transported long distances by wind, so even rural areas can experience high O_3 levels (EPA 2025b).

The O_3 reaction is self-perpetuating (or catalytic) in the presence of sunlight because NO_2 is photochemically reformed from NO. In this way, O_3 is controlled by both NO_x and VOC emissions (NRC 2005). The complexity of these interacting cycles of pollutants means that incremental decreases in one emission may not result in proportional decreases in O_3 (NRC 2005). Although these reactions and interactions are well understood, variability in emission source operations and meteorology creates uncertainty in the modeled O_3 concentrations to which downwind populations may be exposed (NRC 2005). This is especially true for individual projects, like the project, where project-generated criteria air pollutant emissions are not solely derived from a single "point source," but also from mobile sources (cars and trucks), trains, off-road equipment, energy consumption, and area sources (consumer products, architectural coating, etc.).

In many urban areas, O_3 nonattainment is not caused by emissions from the local area alone (EPA 2008). Due to atmospheric transport, contributions of precursors from the surrounding region can also be important (EPA 2008, O_3 NAAQS). Thus, in designing control strategies to reduce O_3 concentrations in a local area, it is often necessary to account for regional transport within the U.S. (EPA 2008). In some areas, such as California, global transport of O_3 from beyond North America also can contribute to nonattainment areas (EPA 2008).

[3] Air pollutants formed through chemical reactions in the atmosphere are referred to as secondary pollutants.

PM can be divided into two categories: directly emitted PM and secondary PM. Secondary PM, like O_3, is formed via complex chemical reactions in the atmosphere between precursor chemicals such as SO_x and NO_x (SJVAPCD 2015). In general, PM_{10} is composed largely of primary particles, and a much greater portion of $PM_{2.5}$ contains secondary particles (EPA 2015b). The secondary formation of $PM_{2.5}$ is dominated by a variety of chemical species or components of atmospheric particles, such as ammonium sulfate, ammonium nitrate, organic carbon mass, elemental carbon, and other soil compounds and oxidized metals. $PM_{2.5}$, sulfate, nitrate, and ammonium ions are predominantly the result of chemical reactions of the oxidized products of SO_2 and NO_x emissions with direct ammonia emission (EPA 2017). Because of the complexity of secondary PM formation, including the potential to be transported long distances by wind, the tonnage of PM-forming precursor emissions in an area does not necessarily result in an equivalent concentration of secondary PM in that area (SJVAPCD 2015).

Because of the long-range transport of some pollutants, important emission sources may be far from the locations where measured pollutant concentrations exceed the AAQS (NRC 2005). Thus, for areas experiencing higher ambient concentrations of pollutants, such as O_3 and PM, controlling emissions of those pollutants and their precursors is typically a regional, often multistate, problem, not a local one (NRC 2005).

San Joaquin Valley Air Pollution Control District and South Coast Air Quality Management District Briefs

In connection with the judicial proceedings culminating in issuance of the Friant Ranch decision, the SJVAPCD and the SCAQMD filed amicus briefs attesting to the extreme difficulty of correlating an individual project's criteria air pollutant emissions to specific health impacts. Both the SJVAPCD and the SCAQMD have among the most sophisticated air quality modeling and health impact evaluation capabilities of the air districts in the State. While the information and arguments presented in those briefs was considered by the California Supreme Court, the Court noted that such information was not part of the administrative record associated with the County's decision to approve the Friant Ranch project. A summary of the key, relevant points of the SJVAPCD and SCAQMD briefs is provided below.

Difference between Toxic Air Contaminants and Criteria Air Pollutants

As explained in Section 3.2.1.1, Pollutants and Effects, a TAC is an air pollutant, identified in regulation by CARB, which may cause or contribute to an increase in deaths or in serious illness, or which may pose a present or potential hazard to human health. TACs are considered under a different regulatory process (California Health and Safety Code section 39650 et seq.) than pollutants subject to CAAQS and NAAQS. Health effects to TACs may occur at extremely low levels and it is typically difficult to identify levels of exposure which do not produce adverse health effects. A criteria air pollutant, on the other hand, is an air pollutant for which acceptable levels of exposure can be determined and for which an AAQS has been set.

As the SJVAPCD explained in their brief, "Although criteria air pollutants can also be harmful to human health, they are distinguishable from TACs and are regulated separately. The most relevant difference between criteria pollutants and TACs for purposes of this case is the manner in which human health impacts are accounted for. While it is common practice to analyze the correlation between an individual facility's TAC emissions and the expected localized human health impacts, such is not the case for criteria pollutants" (SJVAPCD 2015). Unlike with TACs (where assessment occurs in conjunction with environmental analysis for individual projects), the human health impacts associated with criteria air pollutants are analyzed and taken into consideration when EPA sets the

NAAQS for each criteria pollutant. (42 U.S.C. § 7409(b)(1).) The health impact of a particular criteria pollutant is analyzed on a regional and not a facility or individual project level based on how close the area is to complying with (attaining) the NAAQS (SJVAPCD 2015). The SJVAPCD concluded that while it is possible to perform a health impact analysis for TACs, which was done for construction and operation of the project as applicable to the activity areas (see Section 3.2.4 Impacts Analysis), "it is not feasible to conduct a similar analysis for criteria air pollutants because currently available computer modeling tools are not equipped for this task" (SJVAPCD 2015).

Disconnect Between Mass and Concentration

Another important technical nuance is that health effects from air pollutants are related to the concentration of the air pollutant that an individual is exposed to, not necessarily the individual mass quantity of emissions associated with an individual project. For example, health effects from O_3 are correlated with increases in the ambient level of O_3 in the air a person breathes (SCAQMD 2015). However, it takes a large amount of additional precursor emissions to cause a modeled increase in ambient O_3 levels over an entire region (SCAQMD 2015).

For CEQA analyses, project-generated emissions are typically estimated in pounds per day or tons per year and compared to mass daily or annual emission thresholds. While CEQA thresholds are established at levels that the air basin can accommodate without affecting the attainment date for the AAQS, even if a project exceeds established CEQA significance thresholds, this does not mean that one can easily determine the concentration of O_3 or PM that will be created at or near the project site on a particular day or month of the year, or what specific health impacts will occur (SJVAPCD 2015).

As the SJVAPCD points out, the tonnage of PM "emitted does not always equate to the local PM concentration because it can be transported long distances by wind," and "[s]econdary PM, like O_3, is formed via complex chemical reactions in the atmosphere between precursor chemicals such as sulfur dioxides (SO_x) and NO_x," meaning that "the tonnage of PM-forming precursor emissions in an area does not necessarily result in an equivalent concentration of secondary PM in that area" (SJVAPCD 2015). The disconnect between the tonnage of precursor pollutants (NO_x, SO_x and VOCs) and the concentration of O_3 or PM formed is important because it is not necessarily the tonnage of precursor pollutants that causes human health effects, but the concentration of resulting O_3 or PM (SJVAPCD 2015). As discussed previously, the AAQS are established as concentrations of O_3 or PM and not as tonnages of their precursor pollutants (SJVAPCD 2015). The disconnect between the amount of precursor pollutants and the concentration of O_3 or PM formed makes it difficult to determine potential health impacts, which are related to the concentration of O_3 and PM experienced by the receptor rather than levels of NO_x, SO_x, and VOCs produced by a source (SJVAPCD 2015).

As discussed above, attainment of a particular AAQS occurs when the concentration of the relevant pollutant remains below a set threshold on a consistent basis throughout a particular region (SJVAPCD 2015). Because the AAQS are focused on achieving a particular concentration of pollution region-wide, an air district's tools and plans for attaining the AAQS are regional in nature (SJVAPCD 2015). For instance, the computer models used to simulate and predict an attainment date for the O_3 or PM NAAQS in the San Joaquin Valley are based on regional inputs, such as regional inventories of precursor pollutants (NO_x, SO_x and VOCs) and the atmospheric chemistry and meteorology of the San Joaquin Valley (SJVAPCD 2015). At a very basic level, the models simulate future O_3 or PM levels based on predicted changes in precursor emissions San Joaquin Valley Air Basin-wide (SJVAPCD 2015). Because the AAQS are set levels necessary to protect human health, the closer a region is to attaining a particular AAQS, the lower the human health impact is from that pollutant (SJVAPCD 2015).

The goal of these modeling exercises is not to determine whether the emissions generated by a particular factory or development project will affect the date that the San Joaquin Valley Air Basin attains the AAQS (SJVAPCD 2015). Rather, the SJVAPCD's modeling and planning strategy is regional in nature and based on the extent to which all of the emission-generating sources in the San Joaquin Valley Air Basin (current and future) must be controlled in order to reach attainment (SJVAPCD 2015).

Correlation to Health Effects

The SJVAPCD ties the difficulty of correlating the emission of criteria pollutants to health impacts to how O_3 and PM are formed, as explained above. According to SJVAPCD, "even once a model is developed to accurately ascertain local increases in concentrations of photochemical pollutants like O_3 and some particulates, it remains impossible, using today's models, to correlate that increase in concentration to a specific health impact [because] such models are designed to determine regional, population-wide health impacts, and simply are not accurate when applied at the local level" (SJVAPCD 2015).

SCAQMD used O_3, which is formed from the chemical reaction of NO_x and VOCs in the presence of sunlight, as an example of why it is impracticable to determine specific health outcomes from criteria pollutants for all but very large, regional-scale projects. First, forming O_3 "takes time and the influence of meteorological conditions for these reactions to occur, so ozone may be formed at a distance downwind from the sources" (SCAQMD 2015). Second, "it takes a large amount of additional precursor emissions (NO_x and VOCs) to cause a modeled increase in ambient ozone levels over an entire region," with a 2012 study showing that "reducing NO_x by 432 tons per day (157,680 tons/year) and reducing VOC by 187 tons per day (68,255 tons/year) would reduce ozone levels at the SCAQMD's monitor site with the highest levels by only 9 parts per billion" (SCAQMD 2015). SCAQMD thus concludes that it "does not currently know of a way to accurately quantify O_3-related health impacts caused by NO_x or VOC emissions from relatively small projects" (SCAQMD 2015).

Essentially, SCAQMD takes the position that a project emitting only 10 tons per year of NO_x or VOC is small enough that its regional impact on ambient O_3 levels may not be detected in the regional air quality models that are currently used to determine O_3 levels; thus, in this case it would not be feasible to directly correlate project emissions of VOC or NO_x with specific health impacts from O_3 (SCAQMD 2015). Therefore, lead agencies that use SCAQMD 's thresholds of significance may determine that many projects have "significant" air quality impacts and must apply all feasible mitigation measures, yet will not be able to precisely correlate the project to quantifiable health impacts.

Effects on Number of Nonattainment Days

In regard to regional concentrations and air basin attainment, the SJVAPCD emphasized that attempting to identify a change in background pollutant concentrations that can be attributed to a single project, even one as large as the entire Friant Ranch Specific Plan, is a theoretical exercise. The SJVAPCD brief noted that it "would be extremely difficult to model the impact on NAAQS attainment that the emissions from the Friant Ranch project may have" (SJVAPCD 2015). The situation is further complicated by the fact that background concentrations of regional pollutants are not uniform either temporally or geographically throughout an air basin, but are constantly fluctuating based upon meteorology and other environmental factors. As discussed above, the currently available modeling tools are equipped to model the impact of all emission sources in the San Joaquin Valley Air Basin on attainment (SJVAPCD 2015). The SJVAPCD brief then indicated that, "Running the photochemical grid model used for predicting O_3 attainment with the emissions solely from the Friant Ranch project (which equate to less than one-tenth of one

percent of the total NO_x and VOC in the Valley) is not likely to yield valid information given the relative scale involved" (SJVAPCD 2015).

Sacramento Metropolitan Air Quality Management District

As previously discussed, the SMAQMD is one of two California air districts to date to formally release guidance (Interim Recommendation in April 2019 and Final Guidance in October 2020) for lead agencies and practitioners preparing CEQA documents for projects to comply with the Friant Ranch decision. The SMAQMD *Guidance to Address the Friant Ranch Ruling for CEQA Projects in the Sac Metro Air District* fully details how projects should address the Friant Ranch ruling within the 5-Air-District Region (i.e., SMAQMD, Yolo-Solano AQMD, Placer County APCD, El Dorado County AQMD, and Feather River AQMD) (SMAQMD 2020a). This guidance provides insight on the health effects that may result from a project emitting at the maximum thresholds of significance (TOS) levels in the 5-Air-District Region for NO_x, VOCs, and PM, in addition to levels of CO and SO_x calculated proportional to NO_x; provides look-up tables for estimating health effects for strategic areas where growth exceeding thresholds of significance is anticipated; provides modeling guidance for CEQA projects that have emissions in excess of the significance thresholds and are located outside the strategic areas modeled; and provides information on disclosing health effects in an overall health context in a CEQA document.

In support of the formal guidance, in December 2020, the SMAQMD released the *Minor Project Health Effects Screening Tool* and *Strategic Area Project Health Effects Screening Tool* (SMAQMD 2020b) which were developed to estimate health effects for proposed projects within the 5-Air-District Region. For the minor project tool, the user inputs the location of the proposed project in latitude and longitude coordinates using decimal degrees and the tool assumes the maximum TOS (i.e., 82 pounds per day of ROG, NO_x, and $PM_{2.5}$). For the strategic area project health effects tool, the user inputs estimated daily ROG, NO_x, and $PM_{2.5}$ emissions up to 8 times the TOS (i.e., 656 pounds per day of ROG, NO_x, and $PM_{2.5}$) as well as the representative strategic area location. The non-screening option the SMAQMD guidance outlines is the same or similar approach taken in the six available HIAs noted below in "Health Impact Assessments" (i.e., using a PGM and BenMAP for a specific project).

Application of the SMAQMD screening analysis is not appropriate for the project on the whole because the LVSP is outside of the region evaluated in the 5-Air-District guidance.

Bay Area Air District

In 2022, the BAAD released "health effects assessment for criteria air pollutants" guidance to address the Friant Ranch case as part of their 2022 CEQA Guidelines. The following text is the quoted from the BAAD guidance (BAAD 2022):

"To comply with the Friant Ranch decision, lead agencies need to sufficiently explain the nature and magnitude of significant impacts identified by criteria air pollutant and precursor air quality analyses such that readers can meaningfully understand them. Moreover, lead agencies must make a reasonable effort to connect a project's emissions, where significant, to foreseeable health impacts or provide evidence as to why such an analysis is not scientifically possible.

To demonstrate compliance with the Friant Ranch decision, lead agencies should structure the analyses of criteria air pollutant and precursor impacts as follows:

1. Introduce and describe the potential adverse health effects related to exposure to various criteria air pollutants and precursors in exceedance of the NAAQS and CAAQS, both acutely and chronically.

2. Describe the development and use of mass emissions thresholds using substantial evidence provided in the Air District's thresholds justification report.

   Lead agencies must describe the rationale behind the thresholds of significance for evaluating criteria air pollutant and ozone precursor emissions (see Appendix A, Thresholds of Significance Justification). These project-level mass emissions thresholds are developed in consideration of long-term air quality planning in the SFBAAB and are designed to capture excess emissions that would inhibit attainment of the NAAQS and CAAQS for various pollutants. Projects that exceed these mass emissions thresholds, whether before mitigation or following application of mitigation measures, may contribute emissions that would degrade the ambient air quality of the SFBAAB and expose receptors to concentrations of criteria air pollutants found by EPA and CARB to be hazardous to human health. Lead agencies must make a good-faith effort to explain the connection between the thresholds of significance, long-term air quality planning, NAAQS and CAAQS, and the potential for adverse human health impacts to occur from a project's emissions contribution given that neither the NAAQS or CAAQS are not health impact thresholds below which no significant health impacts are expected.

3. Provide a meaningful and understandable narrative of ozone and secondary PM formation.

4. Explain the approach used, including the applicability and limitations of modeling tools, to translate project emissions into health impacts or explain why it was not scientifically feasible to do so.

   Various modeling tools are available to estimate project-level emissions (e.g., CalEEMod). Additionally, EMFAC generates emissions estimates from transportation sources using factors that account for various state and federal regulations that affect gasoline and diesel fuel consumption, as well as the deployment of electric vehicles throughout the state. However, these models do not predict the locations of exceedances of the NAAQS or CAAQS from one project's emissions alone.

   Photochemical grid-based models simulate the chemical interactions and three-dimensional dispersion patterns on a regional, statewide, and national scale. These models are complex and require significant expertise, knowledge, and resources as they build on other third-party models and processing tools that characterize meteorology, emissions, and other environmental conditions, such as land cover, radiative properties, and boundary conditions. Use of these models is typically beyond the resources available for air quality analysis prepared pursuant to CEQA, and even if such an analysis was to be completed consideration would need be given to ensure the results would be meaningful based on modeling and data limitations.

   The Environmental Benefits Mapping and Analysis Program (BenMAP) is an open-source computer program that calculates the number and economic value of air pollution–related death and illnesses. BenMAP relies on national data such as age, health, and economic conditions, to characterize and map health impacts associated with air pollution exposure. Data applicability should be considered to determine whether the model may be appropriate for an air quality

analysis prepared pursuant to CEQA and if such an analysis would provide meaningful results based on modeling and data limitations.

5. If scientifically feasible, tie the project's emissions to potential negative health impacts if emissions would exceed mass emissions thresholds, both before and after implementing mitigation measures."

City of Los Angeles

The City of Los Angeles Department of City Planning, along with its Technical Advisory Panel of air quality consultants, prepared a guidance document on Air Quality and Health Effects to address the Friant Ranch case. The City of Los Angeles's Health Effects guidance document includes an introduction, background and methodology that discusses CEQA thresholds of significance and available models, various air quality and health effects considerations including health effects addressed in plans and regulatory standards, health effects of criteria pollutants and TACs, and relating adverse air quality impacts and health effects conclusions.

The introduction explains that, "This paper provides information to the public regarding health consequences associated with exposure to air pollutants and explains why direct correlation of a project's pollutant emissions and anticipated health effects is currently infeasible, as no expert agency has approved a quantitative method to reliably and meaningfully translate mass emission estimates of criteria air pollutants to specific health effects for the scale of projects typically analyzed in City EIRs" (City of Los Angeles 2019).

The City's guidance continues to state that, "directly correlating a single project's emissions in a typical City EIR to quantifiable human health consequences is currently not scientifically feasible, as it is not possible to conduct such an analysis that would provide reliable or meaningful results. … it is also infeasible to correlate regional emissions from local area-wide projects or plans identified in City EIRs to quantified human health consequences in any reliable or meaningful way, for many of the same reasons, and with additional challenges associated with separating and anticipating reasonably foreseeable emissions from other sources." (City of Los Angeles 2019)

Association of Environmental Professionals – Climate Change Committee

The California Association of Environmental Professionals Winter 2020 Environmental Monitor newsletter included an article titled, "We Can Model Regional Emissions, But Are the Results Meaningful for CEQA?" written by members of the AEP Climate Change Committee, which consists of air quality and climate change experts at environmental consulting firms. The article addresses the Friant Ranch case and HIAs that use PGMs and BenMAP to estimate health impacts from increases in concentrations of O_3 and $PM_{2.5}$.

The article acknowledges that it is technically feasible to conduct regional-scale criteria air pollutant modeling for an individual project, but highlights the limitations of regional-scale dispersion models such as low resolution and spatial averaging that produces "noise" and model uncertainty that can exceed a project's specific emissions, and that regional-scale models are highly contingent upon background concentrations where factors such as meteorology and topography greatly affect the certainty levels of predicted concentrations at receptor points. As a result, there are statistical ranges of uncertainty through all the modeling steps. Due to these factors, it is difficult to predict ground-level secondary PM and O_3 concentrations associated with relatively small emission sources with a high degree of certainty (AEP 2020).

The article also highlights limitations and uncertainties of BenMAP. For example, regional models assign the same toxicity to PM regardless of the source of PM (such as road dust and exhaust), and thus potentially overpredict adverse health effects of PM. BenMAP also assumes that health effects can occur at any concentration, including small incremental concentrations, and assumes that impacts seen at large concentration differences can be linearly scaled down to small increases in concentration, with no consideration of potential thresholds below which health impacts may not occur. Additionally, BenMAP is used for assessing impacts over large areas and populations and was not intended to be used for individual projects. For health incidences, the number of hospitalizations or increase in morbidity predicted by BenMAP is greatly affected by the population characteristics. The article explains that small increases in emissions in an area with a high population have a much greater affect than large increases in emissions over an area with a small population. As a result, the same amount of emissions generated in an urban area could result in greater health consequences than if the same emissions occurred on the urban periphery, where fewer people may be affected (AEP 2020).

The article then concludes that, "Given the margin of uncertainty at each step in the process (regional scale modeling, existing ambient air quality effects on health, population health conditions vulnerability, and marginal health effects of air pollution), the identification of marginal health effects due to individual projects using regional air quality modelling and tools such as BenMap are likely to be within the level of uncertainty and thus defined as "speculative" per CEQA" (AEP 2020).

Health Impact Assessments

At the time of writing, no specific tools have been developed for use in CEQA documents to connect criteria air pollutant emissions from an individual project to specific health effects in response to Friant Ranch outside of the SMAQMD guidance 5-AirDistrict region. However, it has been demonstrated to be technically feasible to use existing regional models and an existing health effect modeling program to evaluate individual projects, which has been conducted for a few projects. The following CEQA documents included a quantitative HIA to address Friant Ranch:

1. California State University Dominguez Hills 2018 Campus Master Plan EIR (CSUDH MP) (Cal State University Dominguez Hills 2019)

2. World Logistics Center Revised Final EIR (WLC) (Moreno Valley 2019)

3. March Joint Powers Association K4 Warehouse and Cactus Channel Improvements EIR (March JPA K4) (March JPA 2019)

4. San Diego State University Mission Valley Campus Master Plan EIR (SDSU) (San Diego State University 2019)

5. Mineta San Jose Airport Amendment to the Airport Master Plan EIR (San Jose Airport) (City of San Jose 2019)

6. City of Inglewood Basketball and Entertainment Center Project EIR (IBEC) (City of Inglewood 2019)

The first step in all the six above listed examples included running a regional PGM, such as the Community Multiscale Air Quality (CMAQ)[4] model or the Comprehensive Air Quality Model with extensions (CAMx)[5] to estimate the increase in concentrations of O_3 and $PM_{2.5}$ as a result of project-generated emissions of criteria and precursor pollutants. Air districts use photochemical air quality models for regional air quality planning. These photochemical models are large-scale air quality models that simulate the changes of pollutant concentrations in the atmosphere using a set of mathematical equations characterizing the chemical and physical processes in the atmosphere (EPA 2025c).

After estimating the increase in concentrations of O_3 and $PM_{2.5}$, the second step in the six examples includes use of BenMAP or BenMAP-CE to estimate the resulting associated health effects. BenMAP estimates the number of health incidences resulting from changes in air pollution concentrations (EPA 2023). The health impact function in BenMAP-CE incorporates four key sources of data: (i) modeled or monitored air quality changes, (ii) population, (iii) baseline incidence rates, and (iv) an effect estimate. While BenMAP can estimate the health effects of emissions of VOC, NO_x, CO, SO_2, and $PM_{2.5}$, O_3 and $PM_{2.5}$ were determined to have the most critical health impacts and thus, were the pollutants evaluated to determine the project's health effects in four of the six examples (i.e., WLC, CSUDH MP, March JPA K4, and San Jose Airport). The current version of BenMAP-CE only has health impact functions associated with O_3 and $PM_{2.5}$, which is why the example HIAs using BenMAP-CE only quantitatively addressed O_3 and $PM_{2.5}$ related health outcomes. As such, all example HIAs focused on O_3 and $PM_{2.5}$.

BenMAP outputs include O_3- and PM-related health endpoints such as premature mortality, hospital admissions, and emergency room visits (City of San Jose 2019). BenMAP uses the following simplified formula to relate changes in ambient air pollution to certain health endpoints (City of San Jose 2019):

$$Health\ Effect = Air\ Quality\ Change \times Health\ Effect\ Estimate \times Exposed\ Population \times Background\ Health\ Incidence$$

Population characteristics are a key variable in the BenMAP estimate of health incidences. As such, small increases in emissions in an area with a high population may have a much greater affect than large increases in emissions over an area with a small population. While location and associated population is a key factor, making the six examples specific not only to the project-generated emissions, but also to the geographic location and underlying population estimates, the findings of the six examples are provided herein for context, particularly for the conclusions.

California State University Dominguez Hills 2018 Campus Master Plan EIR

[4] The CMAQ modeling system includes state-of-the-science capabilities for conducting urban-to-regional-to-hemispheric scale simulations of multiple air quality issues, including tropospheric O_3, fine particles, TACs, acid deposition, and visibility degradation. CMAQ brings together three kinds of models: (1) Meteorological models to represent atmospheric and weather activities, (2) Emission models to represent man-made and naturally-occurring contributions to the atmosphere, and (3) An air chemistry-transport model to predict the atmospheric fate of air pollutants under varying conditions (EPA 2025e).

[5] CAMx is a three-dimensional grid-based Eulerian air quality model designed to estimate the formation and fate of oxidant precursors, primary and secondary particulate matter concentrations, and deposition over regional and urban spatial scales (e.g., over the contiguous U.S.) (EPA 2015a).

For the CSUDH MP, the proposed project retains the existing campus enrollment cap of 20,000 full-time-equivalent students, while providing a framework for development of the CSUDH's campus in a forward-looking manner that accommodates growth from the current enrollment of approximately 11,000 full-time-equivalent students to the maximum enrollment of 20,000 full-time-equivalent students over a planning horizon extending to 2035. The project is located within Los Angeles County within the South Coast Air Basin. For context, the maximum daily emissions of relevant pollutants generated by the CSUDH MP were estimated to be 482.6 pounds per day of VOC, 240.1 pounds per day of NO_x, 2.7 pounds per day of SO_2, and 79.5 pounds per day of $PM_{2.5}$.

The CSUDH MP presented HIA results in terms of an increase in health incidences and the increase in background health incidence for various health outcomes referred to as endpoints. The background health incidence is the actual incidence of health effects as measured in the local population in the absence of additional emissions from the project (CSUDH 2019).

The two highest $PM_{2.5}$-related health outcomes attributed to the CSUDH MP project-related increases in ambient air concentrations included mortality (10.31 incidences per year, 0.0032% in background health incidence) and asthma-related emergency room visits (4.38 incidences per year, 0.0033% in background health incidence). The remaining health endpoints, including asthma-related hospital admissions, all cardiovascular-related hospital admissions (not including myocardial infarctions), all respiratory-related hospital admissions, and nonfatal acute myocardial infarction ranged from 0.00044 to 2.44 incidences per year (0.00047% to 0.0014% in background health incidence) (CSUDH 2019).

O_3-related health outcomes attributed to the CSDUDH project-related increases in ambient air concentrations included respiratory-related hospital admissions (0.67 incidences per year, 0.00034% in background health incidence), mortality (0.28 incidences per year, 0.00013% in background health incidence), and asthma-related emergency room visits for any age range (lower than 3.38 incidences per year for all age groups, lower than 0.0058% percent in background health incidence for all age groups) (CSUDH 2019).

The CSUDH MP HIA then concluded that "for all these health endpoints, the number of estimated incidences is less than 0.0058% of the background health incidence. … When taken into context, the small increase in incidences and the very small percent of the number of background incidences indicate that these health impacts are negligible in a developed, urban environment" (CSUDH 2019).

World Logistics Center Revised Final EIR

The WLC is located within Moreno Valley within Riverside County and the South Coast Air Basin. The WLC assessed the construction and operation of 40,600,00 square feet of logistics facilities and associated infrastructure on 2,610 acres in the Rancho Belago area at the eastern end of Moreno Valley. For context, the maximum daily emissions of relevant pollutants generated by the WLC during combined construction and operations (unmitigated) were estimated to be 603 pounds per day of VOC, 1,818 pounds per day of NO_x, 10.07 pounds per day of SO_2, 1,150 pounds per day of CO, and 137 pounds per day of $PM_{2.5}$. With mitigation, the combined WLC construction and operations were estimated to generate 495 pounds per day of VOC, 1,459 pounds per day of NO_x, 10.07 pounds per day of SO_2, 1,238 pounds per day of CO, and 133 pounds per day of $PM_{2.5}$.

The two highest $PM_{2.5}$-related health outcomes attributed to the WLC project-related increases in ambient air concentrations from unmitigated emissions included mortality (15.19 incidences per year, 0.0047% in background health incidence) and asthma-related emergency room visits (6.63 incidences per year, 0.0051% in background

health incidence). The remaining health endpoints, including asthma-related hospital admissions, all cardiovascular-related hospital admissions (not including myocardial infarctions), all respiratory-related hospital admissions, and nonfatal acute myocardial infarction ranged from 0.52 to 3.17 incidences per year (0.00063% to 0.0029% in background health incidence) (Moreno Valley 2019).

O_3-related health outcomes attributed to the WLC project-related increases in ambient air concentrations from unmitigated emissions included respiratory-related hospital admissions (1.46 incidences per year, 0.00075% in background health incidence), mortality (0.69 incidences per year, 0.00033% in background health incidence), and asthma-related emergency room visits for any age range (lower than 8.20 incidences per year for all age groups, lower than 0.014% percent in background health incidence for all age groups) (Moreno Valley 2019).

The WLC HIA then concluded that "when taken into context, the small increase in incidences and the very small percent of the number of background incidences indicate that these health impacts are minimal in a developed, urban environment" (Moreno Valley 2019).

March Joint Powers Association K4 Warehouse and Cactus Channel Improvements EIR

The March JPA K4 project is located within Riverside County within the South Coast Air Basin. The proposed project involves the development of the five parcels on the 35.4-acre K4 Parcel with a 718,000-square-foot building conservatively assumed to be occupied by High-Cube ecommerce/fulfillment center use. The mitigated maximum daily operational emissions of relevant pollutants generated by the March JPA K4 were estimated to be 41.0 pounds per day of VOC, 253.0 pounds per day of NO_x, 1.4 pounds per day of SO_x, and 30.3 pounds per day of $PM_{2.5}$. The March JPA K4 HIA determined that, "for all these health endpoints, the number of estimated incidences is less than 0.0042% of the baseline number of incidences," and that "these health impacts are conservatively estimated, and the actual impacts may be zero" (March JPA 2019).

San Diego State University Mission Valley Campus Master Plan EIR

The SDSU project is located within the City of San Diego within the San Diego Air Basin. The SDSU project proposes construction and operation of the SDSU Mission Valley campus, stadium, parks, recreation, and innovation area to accommodate up to 15,000 full-time-equivalent students over time, resulting in a total student headcount of approximately 20,000 students. The maximum daily emissions of relevant pollutants generated by SDSU were estimated to be 314.1 pounds per day of VOC, 1,120.7 pounds per day of NO_x, 6.5 pounds per day of SO_2, and 205.9 pounds per day of $PM_{2.5}$ (SDSU 2019).

The $PM_{2.5}$-related health outcomes attributed to the SDSU project-related increases in ambient air concentrations included mortality (8.97 incidences per year, 0.0026% in background health incidence) and asthma-related emergency room visits (5.29 incidences per year, 0.0040% in background health incidence). The remaining health endpoints, including asthma-related hospital admissions, all cardiovascular-related hospital admissions (not including myocardial infarctions), all respiratory-related hospital admissions, and nonfatal acute myocardial infarction ranged from 0.00083 to 3.33 incidences per year (0.00223% to 0.00164% in background health incidence) (SDSU 2019).

O_3-related health outcomes attributed to the SDSU project-related increases in ambient air concentrations included respiratory-related hospital admissions (0.45 incidences per year, 0.0002% in background health incidence), mortality (0.21 incidences per year, 0.00010% in background health incidence), asthma-related emergency room

visits for age groups 0-17 (1.73 incidences per year, 0.003% percent in background health incidence), and asthma-related emergency room visits for age groups 18-99 (2.02 incidences per year, 0.002% percent in background health incidence) (SDSU 2019).

The SDSU HIA found that "health effects estimation using the log-linear method presumes that effects seen at large concentration differences can be linearly scaled down to small increases in concentration, with no consideration of potential thresholds below which health effects may occur; thus, this potentially overstates the potential effects. In summary, health effects are conservatively estimated, and the actual effects may be zero" (SDSU 2019).

Mineta San Jose Airport Amendment to the Airport Master Plan EIR

The San Jose Airport is located in Santa Clara County within the San Francisco Bay Area Air Basin. The San Jose Airport project includes amending the approved 2018 Airport Master Plan to a) shift the planning horizon year from 2027 to 2037, b) modifying future facility requirements at the airport to reflect updated demand forecasts, and c) modifying certain components of the airfield to reduce to potential for runway incursions (City of San Jose 2019). The estimated maximum daily incremental operational emissions of relevant pollutants generated by the San Jose Airport project were estimated to be -49.4 pounds per day of VOC, 5,325 pounds per day of NO_x, and 52 pounds per day of $PM_{2.5}$. However, the following emissions inventory was assumed for the HIA: 57.3 pounds per day of VOC, 5,643.0 pounds per day of NO_x, and 51.6 pounds per day of $PM_{2.5}$.

The San Jose Airport HIA estimated that the highest health endpoint from $PM_{2.5}$ was mortality at 4.46 incidences (0.0017% percent in background health incidence). All other $PM_{2.5}$-related health incidences ranged from 0.00022 to 1.89 (0.00027% to 0.0016% percent in background health incidence). For O_3-related health endpoints, the highest was emergency room visits for asthma, which was estimated to be 11.05 incidences (0.028% percent in background health incidence) for ages 0-17 and 14.59 incidences (0.019% percent in background health incidence) for ages 18-99 (City of San Jose 2019). Of the six examples discussed herein, the San Jose Airport resulted in the greatest O_3 incidences, which correlates with the estimated high emissions of O_3-precursors, specifically NO_x at 5,643 pounds per day. Nonetheless, the conclusion was that "when taken into context, the small increase in incidences and the very small percent of the number of background incidences indicate that these health impacts are negligible in a developed, urban environment" (City of San Jose 2019).

City of Inglewood Basketball and Entertainment Center Project EIR

The IBEC project HIA provides another important data point for consideration. The IBEC project consists of an arena designed to host the LA Clippers basketball team with up to 18,000 fixed seals for National Basketball Association games and up to 500 additional temporary seats for events such as family shows, concerts, conventions, corporate events, and non-LA Clippers sporting events. The IBEC project is located within Los Angeles County within the South Coast Air Basin. The IBEC EIR evaluated nine operational scenarios; across these multiple scenarios, the estimated maximum daily net increase in operational emissions of relevant pollutants was 94 pounds per day of VOC, 99 pounds per day of NO_x, 3 pounds per day of SO_x, and 89 pounds per day of $PM_{2.5}$.

The IBEC EIR analysis provided helpful context on using regional models for individual projects, as follows: "Generally, models that correlate criteria air pollutant concentrations with specific health effects focus on regulatory decision-making that will apply throughout an entire air basin or region. These models focus on the region-wide health effects of pollutants so that regulators can assess the costs and benefits of adopting a proposed regulation that applies to an entire category of air pollutant sources, rather than the health effects related to emissions from

a specific proposed project or source. Because of the scale of these analyses, any one project is likely to have only very small incremental effects which may be difficult to differentiate from the effects of air pollutant concentrations in an entire air basin. … For regional pollutants, it is difficult to trace a particular project's criteria air pollutant emissions to a specific health effect. Moreover, the modeled results may be misleading because the margin of error in such modeling is large enough that, even if the modeled results report a given health effect, the model is sufficiently imprecise that the actual effect may differ from the reported results; that is, the modeled results suggest precision, when in fact available models cannot be that precise on a project level" (City of Inglewood 2019).

For O_3-related health endpoints, emergency room visits for asthma was estimated to be 0.087 incidence per year for all studied age groups combined, 0.016 incidence per year of respiratory-related hospital admissions, and less than 0.02 incidence per year of mortality; the amount of estimated incremental health effects incidence is less than 0.0001% of the baseline number of health effects incidences in the study area.

A key finding from the IBEC HIA was that for $PM_{2.5}$-related health endpoints, due to the very small changes in ambient $PM_{2.5}$ concentrations as modeled by CMAQ, all of the estimated incremental health incidences were negative values. The IBEC HIA stated that this further confirms that the modeled $PM_{2.5}$ concentrations are within the model's margin of error, no meaningful conclusions can be reached on the specific health effects that may be caused by the proposed project O_3 precursor and $PM_{2.5}$ emissions, and health impacts may in fact be zero, and they would still be well within the models' margin of error (City of Inglewood 2019).

Summary

It is also important to note that while these results conclude that the project emissions do not result in a substantial increase in health incidences, the estimated emissions and assumed toxicity is also conservatively inputted into the HIA and thus, overestimate health incidences, particularly for $PM_{2.5}$. For example, as discussed in the San Jose Airport HIA, "the USEPA has also stated that results from various studies have shown the importance of considering particle size, composition, and particle source in determining the health impacts of PM. Further, USEPA found that studies have reported that particles from industrial sources and from coal combustion appear to be the most significant contributors to PM-related mortality, consistent with the findings by Rohr and Wyzga and others. This is particularly important to note here, as the majority of PM emissions generated from the project are from entrained roadway dust, and not from combustion. Therefore, by not considering the relative toxicity of PM components, the results presented here are conservative" (City of San Jose 2019).

As explained in the SJVAPCD brief and noted previously, running the PGM used for predicting O_3 attainment with the emissions solely from an individual project like the Friant Ranch project or the project is not likely to yield valid information given the relative scale involved. The six examples discussed herein support the SJVAPCD's brief contention that consistent, reliable, and meaningful results may not be provided by methods applied at this time. Accordingly, additional work in the industry and more importantly, air district participation, is needed to develop a more meaningful analysis to correlate project-level mass criteria air pollutant emissions and health effects for decision makers and the public. Furthermore, at the time of writing, none of the HIAs that were reviewed has concluded that health effects estimated using the PGM and BenMAP approach are substantial provided that the estimated project-generated incidences represent a very small percent of the number of background incidences, potentially within the models' margin of error.

Co-Benefits Risk Assessment Health Impacts Screening and Mapping Tool

The U.S. EPA's COBRA health impacts screening and mapping tool can explore how changes in air pollution, specifically $PM_{2.5}$ and O_3, from a policy, program, or other action can affect human health at the county, state, regional, or national levels. COBRA also estimates the economic value of the health benefits associated with changes in air pollution. COBRA can map and visually represent the air quality, human health, and health-related economic impacts from emissions of $PM_{2.5}$, SO_2, NO_X, NH_3, and VOCs that result from an action. Built into COBRA are emissions inventories, a simplified air quality model, health impact equations, and economic valuations ready for use, based on assumptions that the U.S. EPA currently uses as reasonable best estimates (EPA 2024b).

COBRA estimates changes in total annual ambient concentrations of $PM_{2.5}$, including primary $PM_{2.5}$ emissions and the formation of secondary $PM_{2.5}$ from precursor pollutants, such as SO_2, NO_x, NH_3, and VOCs. With the release of version 5.0 in 2024, COBRA now also estimates the impacts of changes in O_3 formation as a result of changes in pollutants assessed by the model, specifically NO_x and VOCs. COBRA uses a series of health impact functions, taken from the peer-reviewed epidemiological literature, to estimate how changes in outdoor air quality result in changes in the incidence of a variety of health outcomes (e.g., premature mortality, heart attacks, asthma exacerbation, lost workdays). Incidence refers to the number of new cases of a health outcome over a specified time period. Finally, COBRA multiplies the change in incidence for each health outcome by a monetary value specific to that outcome. COBRA outputs the Health Effects and Valuation Results which includes a table of nationwide results as COBRA calculates health benefits in all counties in the contiguous United States due to the transport of outdoor air pollutants between counties and states. Accordingly, results are available for a particular state or county and are also provided in map form. Both the table and the map provide county-level changes in air quality (e.g., total annual average $PM_{2.5}$ concentration in $\mu g/m^3$), incidence of each health endpoint, and associated economic values. COBRA provides estimates on changes in mortality, infant mortality, nonfatal heart attacks, respiratory hospital admissions, cardiovascular hospital admissions, acute bronchitis, emergency room visits, work loss days, and asthma exacerbation (EPA 2024b).

The change in incidence is not necessarily a whole number because COBRA calculates small statistical risk reductions that are then aggregated over the entire population. Estimates of health impacts have a direct relationship with population density: areas with higher population density tend to see higher health benefits of reduced emissions than less dense areas (EPA 2024b). This is because there are more people breathing cleaner air in the areas with higher population density. The reverse would also be true where areas with higher population density tend to see higher adverse health consequences of increased emissions compared to less dense areas.

COBRA contains detailed emission estimates of $PM_{2.5}$, SO_2, NO_X, and VOCs for the year 2016, and detailed projections for 2023 and 2028 as developed by the U.S. EPA. Users create their own scenario by specifying increases or decreases to one of the three baseline emission estimates - 2016, 2023, or 2028 (EPA 2024b). These baselines account for federal and state regulations as of May 2018.

EPA states that those who should use COBRA includes but is not limited to "analysts looking to improve their understanding of the air, health, and related economic benefits of clean energy or other policies that reduce emissions" and "environmental agencies interested in reviewing many options to identify policies that maximize health and economic benefits" (EPA 2025e). COBRA was originally developed by Abt Associates Inc. in 2002 and updated in 2012, 2017, 2020, 2021, and 2024 (EPA 2025f). COBRA is based on rigorous methods used by EPA health benefits assessments and adapted for use as a screening model.

Based on the EPA records of COBRA citations, it was used by at least approximately 150 publications as of April 24, 2024. Many of the publications evaluated programs, policies, or large areas of potential effect such as statewide efforts. The only environmental analysis was an Environmental Impact Statement for New York State's procurement of offshore wind energy; no CEQA analyses were cited (EPA 2024c). This publication list supports EPA's statement that COBRA is a valid modeling tool for state and local governments to (1) better understand the potential for clean energy to enhance air quality, health, and well-being, (2) design or select program options that maximize benefits, (3) build support for clean energy investments based on the air quality and health benefits, (4) narrow a list of policy options to those that should be evaluated using more sophisticated air quality models, (5) present information about localized health benefits in easy–to–interpret tables and maps, and (6) support a balanced decision-making process that considers both the potential costs and benefits of policy options (EPA 2024d). However, this publication list also supports that COBRA is better fit for broad analyses, such as policies and programs undertaken by state governments, rather than a CEQA analysis for an individual project.

In EPA's COBRA Questions and Answers, it addresses the question of "what is the difference between COBRA and BenMAP?" (BenMAP described in the above sections) and states that, "The key difference between BenMAP and COBRA is that COBRA has a built-in, reduced-form air quality model, while BenMAP does not. To convert changes in air pollution to changes in air quality, a tool will need an air quality model. Because BenMAP does not have this built-in model, it requires inputs of the changes in air quality rather than emissions. BenMAP users can utilize standalone air quality models, such as the Community Multi-scale Air Quality Model (CMAQ), to determine air quality changes. Additionally, BenMAP can be used to analyze health impacts at a finer geographic resolution than COBRA, depending on the scale of the air quality data that users provide. BenMAP also includes preloaded population and baseline health incidence data forecasts for all years out to 2050. COBRA only analyzes health impacts at the county-level and baseline health incidence data for 2016, 2023, and 2028. However, the desktop edition of COBRA also has advanced features that allow the user to import inputs for other years. Apart from these differences, COBRA and BenMAP both use the same approach to estimating health impacts, and both tools use the same default concentration-response functions and economic valuation functions for their calculations." (EPA 2025g)

5 Evaluation of the Project's Health Effects

Based on the evaluation of methods available provided in Section 4, this evaluation does not attempt to quantify health effects, but builds upon the discussion provided in Sections 2 and 3 to disclose potential health effects associated with the project. As explained in Section 2, the EPA and CARB have established AAQS at levels above which concentrations could be harmful to human health and welfare, with an adequate margin of safety. Further, California air districts have established emission-based thresholds that provide project-level estimates of criteria air pollutant quantities that air basins can accommodate without affecting the attainment dates for the AAQS. Accordingly, elevated levels of criteria air pollutants as a result of a project's emissions could cause adverse health effects associated with these pollutants.

Construction of the LVSP would result in emissions that would exceed the ICAPCD thresholds for criteria air pollutants, including VOCs, NO_x, CO, PM_{10}, and $PM_{2.5}$ after implementation of project design features (PDFs) and mitigation. Similarly, operation of the LVSP would result in exceedances of regional thresholds for emissions of VOCs, NO_x, CO, PM_{10}, and $PM_{2.5}$, even after implementation of PDFs and mitigation. Therefore, the Project would potentially result in a cumulatively considerable increase in emissions of nonattainment pollutants.

As discussed in above, health effects associated with O_3 include respiratory symptoms, worsening of lung disease leading to premature death, and damage to lung tissue. VOCs and NO_x are precursors to O_3 and the contribution of VOCs and NO_x to regional ambient O_3 concentrations is the result of complex photochemistry. The increases in O_3 concentrations due to O_3 precursor emissions tend to be found downwind of the source location because of the time required for the photochemical reactions to occur. Further, the potential for exacerbating excessive O_3 concentrations would also depend on the time of year that the VOC emissions would occur, because exceedances of the O_3 NAAQS and CAAQS tend to occur between April and October when solar radiation is highest. As described above, due to the lack of quantitative methods to assess this complex photochemistry, the holistic effect of a single project's emissions of O_3 precursors is speculative.

Health effects associated with NO_x and NO_2 (which is a constituent of NO_x) include lung irritation and enhanced allergic responses (see Section 3; CARB 2022e). Although Project operations would generate NO_x emissions that would exceed the SCAQMD mass daily thresholds, it is unlikely that construction of the Project would contribute to exceedances of the NAAQS and CAAQS for NO_2 because the SCAB is designated as in attainment of the NAAQS and CAAQS for NO_2 and the existing NO_2 concentrations in the area are well below the NAAQS and CAAQS standards. Nonetheless, because there are nearby existing and proposed receptors that could be affected, the Project could result in potential health effects associated with NO_2 and NO_x.

Health effects associated with CO include chest pain in patients with heart disease, headache, light-headedness, and reduced mental alertness (See Section 3; CARB 2022f). CO tends to be a localized impact associated with congested intersections. The associated potential for CO hotspots were discussed in Section 4.3, Air Quality, of the EIR and are determined to be a less-than-significant impact. Thus, the Project's CO emissions would not contribute to significant health effects associated with CO.

Health effects associated with PM_{10} and $PM_{2.5}$ include premature death and hospitalization, primarily for worsening of respiratory disease (See Section 3; CARB 2022h). Operation of the Project would exceed the SCAQMD thresholds for PM_{10} and $PM_{2.5}$. As such, the Project would potentially contribute to exceedances of the NAAQS and CAAQS for particulate matter and obstruct the SCAB from coming into attainment for these pollutants. Because the Project has the potential to contribute substantial particulate matter during operation, the Project could result in associated health effects.

While the above scientific and technological constraints present considerable doubt that quantifying health effects for individual CEQA projects may not accurately and meaningfully inform the public of how project-generated bare numbers (i.e., estimated criteria air pollutant emissions) translate to create potential adverse health effects, due to the size and scale of the Plan, additional analysis is presented below for emissions occurring within Imperial County.

Co-Benefits Risk Assessment Health Impacts Screening and Mapping Tool Results

The EPA CO–Benefits Risk Assessment (COBRA) screening model was used to estimate the potential health effects of the project based on the emissions of air pollutants (EPA 2021). The analysis year of 2055 was selected as it is the Project's buildout year. The state of California and Imperial County was selected for the location. For the statewide run, California was selected as the geographical extent. The criteria air pollutant emissions estimated using the methodologies in Section 4.3, Air Quality, were assumed for each location. A discount rate of 2% was selected as it is the default. COBRA assumes changes in adult mortality and non-fatal heart attacks occur over a 20-year period.

For Imperial County,[6] O_3 and $PM_{2.5}$ related health outcomes attributed to project-related increases in ambient air concentrations include asthma-related emergency room visits (0.002 incidences per year), lung cancer incidence (0.189 incidences per year), all cardiovascular-related hospital admissions (not including myocardial infarctions) (0.914 incidences per year), all respiratory-related hospital admissions (0.5 incidences per year), mortality (2.1 – 4.9 incidences per year), and nonfatal acute myocardial infarction (1.575 incidences per year for all age groups). For context, between 2020-2022, the CDPH reported that Imperial County had an annual average of 1,653 mortalities from all causes and an age-adjusted death rate of 790 mortalities per 100,000 population (CDPH 2024).

On a statewide level, O_3 and $PM_{2.5}$ related health outcomes attributed to project-related increases in ambient air concentrations include asthma-related emergency room visits (0.019 incidences per year), lung cancer incidence (1.252 incidences per year), all cardiovascular-related hospital admissions (not including myocardial infarctions) (2.285 incidences per year), all respiratory-related hospital admissions (2 incidences per year), mortality (14-32 incidences per year), and nonfatal acute myocardial infarction (11.5 incidences per year for all age groups). For context, between 2020-2022, the CDPH reported that the state of California had an annual average of 322,300 mortalities from all causes and an age-adjusted death rate of 670 mortalities per 100,000 population (CDPH 2024).

In summary, although the project has the potential to result in health effects associated with emissions of criteria air pollutants as described above, there are numerous scientific and technological complexities associated with correlating criteria air pollutant emissions from an individual project to specific health effects or potential additional nonattainment days, and methods available to quantitatively evaluate health effects may not be appropriate to apply to emissions associated with the project, which cannot be estimated with a high-level of accuracy. Nonetheless, additional information is provided to support impact conclusions in the air quality analysis that explains what is known and what is not given constraints.

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Appendix D

Carbon Monoxide Hotspots Intersection Volume Calculations

#	Intersection	Year 2050 With SP Phase Three				
		Total SP Project Trips on Intersection Legs		Total Volumes on Intersection Legs		
		AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	Daily
1	SR-111 / Lincoln Street	1,690	2,312	2,443	3,256	32,560
2	SR-86 / 66th Avenue	1,338	1,832	3,610	4,267	42,670
3	SR-111 / Davis Road	1,795	2,455	1,912	2,592	25,920
4	SR-111 / English Road	1,692	2,315	1,816	2,460	24,600
5	SR-111 / Main Street (in Niland)	944	1,294	1,086	1,499	14,990
6	SR-111 / Pound Road	1,274	1,791	1,501	2,013	20,130
7	SR-111 / Sinclair Road	2,259	3,211	2,508	3,445	34,450
8	SR-111 / Lindsey Road	2,871	**4,114**	3,079	4,321	43,210
9	SR-111 / Main Street (in Calipatria)	**2,899**	4,106	3,772	4,899	48,990
10	SR-86 / SR-78 (west)	575	786	1,549	2,007	20,070
11	SR-78/86 / Lack Road	573	786	1,618	2,098	20,980
12	SR-78/86 / Center Street (Forrester Road)	790	1,082	2,125	2,605	26,050
13	SR-86 / SR-78 (east)	257	353	1,441	1,709	17,090
14	SR-78 / Brandt Road	735	1,008	1,644	2,011	20,110
15	SR-111 / SR-78 WB Ramps	2,190	2,897	2,836	3,625	36,250
16	SR-111 / SR-78 EB Ramps	1,476	2,639	2,096	3,340	33,400
17	SR-86 / Kalin Road	623	853	1,130	1,471	14,710
18	SR-86 / 1st Street	1,301	1,782	3,384	3,979	39,790
19	SR-111 / Ben Hulse Highway	1,475	2,031	3,012	3,563	35,630
20	SR-86 / Barioni Boulevard	813	1,115	3,468	3,652	36,520
21	SR-111 / Worthington Road	1,402	1,920	3,423	3,936	39,360
22	SR-86 / Aten Road	668	916	4,147	4,467	44,670
23	SR-111 / Aten Road	1,326	1,815	3,703	4,200	42,000
24	SR-86 / Adams Avenue	488	673	3,721	4,501	45,010
25	SR-111 / Evan Hewes Highway	1,248	1,711	4,373	4,983	49,830
26	Forrester Road / I-8 WB Ramps	104	142	601	838	8,380
27	Forrester Road / I-8 EB Ramps	79	43	527	529	5,290
28	SR-86 / I-8 Westbound Ramps	121	166	2,521	2,660	26,600
29	SR-86 / I-8 Eastbound Ramps	104	98	1,441	1,782	17,820
30	SR-111 / Heber Road	578	793	3,371	4,134	41,340
31	Cesar Chavez Boulevard / SR-98 (Birch Street)	164	225	2,448	2,594	25,940
32	SR-111 / SR-98 (Birch Street)	466	640	4,293	4,999	49,990
33	Cesar Chavez Boulevard / 2nd Street	285	391	2,439	3,728	37,280
34	SR-111 / 2nd Street	172	237	1,618	1,974	19,740
35	SR-7 / I-8 Westbound Ramps	85	117	722	801	8,010
36	SR-7 / I-8 Eastbound Ramps	85	117	785	1,150	11,500
37	SR-7 / SR-98	85	117	1,062	1,539	15,390
38	SR-7 / Maggio Road	85	117	1,082	1,529	15,290

Appendix E
Health Risk Assessment

Appendix F
Energy Calculations

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Construction

Total Proposed Project Construction Petroleum Demand

Phase 1	Off-road	Hauling	Vendor	Worker
	28,533,408	1,017,890	8,605,796	14,722,386
Total Diesel	38,157,094			
Total Gasoline	14,722,386			
Total Petroleum	**52,879,480**			

Phase 2	Off-road	Hauling	Vendor	Worker
	8,627,559	386,192	3,624,729	6,201,543
Total Diesel	12,638,481			
Total Gasoline	6,201,543			
Total Petroleum	**18,840,024**			

Phase 3	Off-road	Hauling	Vendor	Worker
	7,572,068	252,388	2,983,646	5,095,276
Total Diesel	10,808,102			
Total Gasoline	5,095,276			
Total Petroleum	**15,903,377**			

Project Total	Off-road	Hauling	Vendor	Worker
	44,733,036	1,656,470	15,214,171	26,019,205
Total Diesel	61,603,676			
Total Gasoline	26,019,205			
Total Petroleum	**87,622,882**			

Operation

Type	**Total**	**Units**
Phase 1		
Petroleum	21,092,847	gallons/year
Electricity	4,627,886,007	kWh/year
Natural Gas	341,407,831	kBTU/year
Phase 2		
Petroleum	33,899,530	gallons/year
Electricity	5,834,810,398	kWh/year
Natural Gas	575,567,363	kBTU/year
Phase 3		
Petroleum	38,941,660	gallons/year
Electricity	7,634,942,548	kWh/year
Natural Gas	597,165,464	kBTU/year

Constants		
Fuel	**KgCO2/Gallon**	1000 Kg in MT
Gasoline	8.78	
Diesel	10.21	

Source: The Climate Registry 2021

Table 2.1 U.S. Default Factors for Calculating CO_2 Emissions from Combustion of Transport Fuels

Fuel Type	Carbon Content (Per Unit Energy)	Heat Content	Fraction Oxidized	CO_2 Emission Factor (Per Unit Volume)
Fuels Measured in Gallons	kg C / MMBtu	MMBtu / barrel		kg CO_2 / gallon
Gasoline	19.2	5.25	1	8.78
Diesel Fuel	20.2	5.80	1	10.21

Construction

Source	Percent	Total MTCO2	Diesel (Gallons)	Gasoline (Gallons)
Phase 1 - 2025				
Off-road	37.7%	13,789	1,350,502	
Electricity	0.0%	0		
Worker	35.3%	12,911		1,470,483
Vendor	25.8%	9,436	924,216	
Hauling	1.1%	402	39,405	
Onsite Truck	0.0%	0		
Total	*99.9%*	*36,575*	*2,314,123*	*1,470,483*
Phase 1 - 2026				
Off-road	38.2%	13,807	1,352,299	
Electricity	0.0%	0		
Worker	35.1%	12,687		1,444,933
Vendor	25.7%	9,289	909,793	
Hauling	1.1%	398	38,941	
Onsite Truck	0.0%	0		
Total	*100.1%*	*36,144*	*2,301,033*	*1,444,933*
Phase 1 - 2027				
Off-road	38.6%	13,791	1,350,745	
Electricity	0.0%	0		
Worker	34.9%	12,469		1,420,178
Vendor	25.4%	9,075	888,832	
Hauling	1.1%	393	38,493	
Onsite Truck	0.0%	0		
Total	*100.0%*	*35,728*	*2,278,070*	*1,420,178*
Phase 1 - 2028				
Off-road	39.1%	13,824	1,353,981	
Electricity	0.0%	0		
Worker	34.7%	12,268		1,397,322
Vendor	25.1%	8,874	869,180	
Hauling	1.1%	389	38,092	
Onsite Truck	0.0%	0		
Total	*100.0%*	*35,356*	*2,261,253*	*1,397,322*
Phase 1 - 2029				
Off-road	39.7%	13,808	1,352,355	
Electricity	0.0%	0		
Worker	34.5%	11,999		1,366,629
Vendor	24.8%	8,625	844,796	
Hauling	1.0%	348	34,064	
Onsite Truck	0.0%	0		
Total	*100.0%*	*34,780*	*2,231,216*	*1,366,629*
Phase 1 - 2030				
Off-road	40.2%	13,793	1,350,895	
Electricity	0.0%	0		
Worker	34.4%	11,803		1,344,266
Vendor	24.4%	8,372	819,946	
Hauling	1.0%	343	33,604	
Onsite Truck	0.0%	0		
Total	*100.0%*	*34,310*	*2,204,445*	*1,344,266*
Phase 1 - 2031				
Off-road	40.7%	13,778	1,349,504	
Electricity	0.0%	0		
Worker	34.3%	11,612		1,322,529
Vendor	23.9%	8,091	792,461	
Hauling	1.0%	339	33,157	
Onsite Truck	0.0%	0		
Total	*99.9%*	*33,854*	*2,175,122*	*1,322,529*
Phase 1 - 2032				
Off-road	41.3%	13,845	1,356,011	
Electricity	0.0%	0		
Worker	34.2%	11,465		1,305,781
Vendor	23.5%	7,878	771,580	
Hauling	1.0%	335	32,833	
Onsite Truck	0.0%	0		
Total	*100.0%*	*33,523*	*2,160,424*	*1,305,781*
Phase 1 - 2033				
Off-road	41.7%	13,779	1,349,555	
Electricity	0.0%	0		
Worker	34.1%	11,268		1,283,336
Vendor	23.1%	7,633	747,595	
Hauling	1.0%	330	32,363	
Onsite Truck	0.0%	0		
Total	*99.9%*	*33,043*	*2,129,514*	*1,283,336*
Phase 1 - 2034				
Off-road	42.2%	13,788	1,350,441	
Electricity	0.0%	0		
Worker	34.1%	11,141		1,268,962
Vendor	22.7%	7,417	726,422	
Hauling	1.0%	327	32,001	
Onsite Truck	0.0%	0		
Total	*100.0%*	*32,673*	*2,108,864*	*1,268,962*
Phase 1 Floodway - 2025				
Off-road	93.8%	11,250	1,101,900	
Electricity	0.0%	0		
Worker	4.2%	504		57,375
Vendor	2.0%	240	23,495	
Hauling	0.0%	0		
Onsite Truck	0.0%	0		
Total	*100.0%*	*11,994*	*1,125,394*	*57,375*
Phase 1 Floodway - 2026				
Off-road	93.9%	11,251	1,101,983	
Electricity	0.0%	0		
Worker	4.1%	491		55,953
Vendor	2.0%	240	23,471	
Hauling	0.0%	0	0	
Onsite Truck	0.0%	0		
Total	*100.0%*	*11,982*	*1,125,454*	*55,953*
Phase 1 Floodway - 2027				
Off-road	94.0%	11,250	1,101,883	
Electricity	0.0%	0		
Worker	4.1%	491		55,889
Vendor	1.9%	227	22,272	
Hauling	0.0%	0	0	
Onsite Truck	0.0%	0		
Total	*100.0%*	*11,968*	*1,124,156*	*55,889*
Phase 1 Floodway - 2028				
Off-road	94.2%	11,293	1,106,089	
Electricity	0.0%	0		
Worker	4.0%	480		54,617
Vendor	1.9%	228	22,310	
Hauling	0.0%	0	0	
Onsite Truck	0.0%	0		
Total	*100.1%*	*11,989*	*1,128,399*	*54,617*
Phase 1 Floodway - 2029				
Off-road	94.3%	11,255	1,102,340	
Electricity	0.0%	0		
Worker	3.9%	465		53,015
Vendor	1.8%	215	21,041	
Hauling	0.0%	0	0	
Onsite Truck	0.0%	0		
Total	*100.0%*	*11,935*	*1,123,381*	*53,015*
Phase 1 Floodway - 2030				
Off-road	94.4%	11,253	1,102,134	
Electricity	0.0%	0		
Worker	3.9%	465		52,949
Vendor	1.8%	215	21,015	
Hauling	0.0%	0	0	
Onsite Truck	0.0%	0		
Total	*100.1%*	*11,920*	*1,123,149*	*52,949*
Phase 1 Floodway - 2031				
Off-road	94.5%	11,252	1,102,012	
Electricity	0.0%	0		
Worker	3.8%	452		51,531
Vendor	1.7%	202	19,825	
Hauling	0.0%	0	0	
Onsite Truck	0.0%	0		
Total	*100.0%*	*11,906*	*1,121,837*	*51,531*
Phase 1 Floodway - 2032				
Off-road	94.6%	11,283	1,105,048	
Electricity	0.0%	0		
Worker	3.7%	441		50,260
Vendor	1.7%	203	19,858	
Hauling	0.0%	0	0	
Onsite Truck	0.0%	0		
Total	*100.0%*	*11,927*	*1,124,906*	*50,260*
Phase 1 Floodway - 2033				
Off-road	94.7%	11,252	1,102,101	
Electricity	0.0%	0		
Worker	3.7%	440		50,073
Vendor	1.6%	190	18,621	
Hauling	0.0%	0	0	
Onsite Truck	0.0%	0		
Total	*100.0%*	*11,882*	*1,120,722*	*50,073*
Phase 1 Floodway - 2034				
Off-road	94.8%	11,254	1,102,223	

Operation

Type	Total	Units
Phase 1		
Petroleum	18,362,338	gallons/year
Electricity	4,627,886,007	kWh/year
Natural Gas	341,407,831	kBTU/year

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Constants

Fuel	KgCO2/Gallon	1000 Kg in MT
Gasoline	8.78	
Diesel	10.21	

Source: The Climate Registry 2021

Table 2.1 U.S. Default Factors for Calculating CO_2 Emissions from Combustion of Transport Fuels

Fuel Type	Carbon Content (Per Unit Energy)	Heat Content	Fraction Oxidized	CO_2 Emission Factor (Per Unit Volume)
Fuels Measured in Gallons	**kg C / MMBtu**	**MMBtu / barrel**		**kg CO_2 / gallon**
Gasoline	19.2	5.25	1	8.78
Diesel Fuel	20.2	5.80	1	10.21

Electricity	0.0%	0		
Worker	3.6%	427		48,674
Vendor	1.6%	190	18,603	
Hauling	0.0%	0	0	
Onsite Truck	0.0%	0		
Total	*100.0%*	*11,871*	*1,120,826*	*48,674*
Phase 1 Roadway - 2025				
Off-road	28.0%	208	20,338	
Electricity	0.1%	1		
Worker	41.9%	311		35,391
Vendor	4.0%	30	2,905	
Hauling	26.0%	193	18,885	
Onsite Truck	0.0%	0		
Total	*100.0%*	*742*	*42,129*	*35,391*
Phase 1 Roadway - 2026				
Off-road	85.3%	3,255	318,845	
Electricity	0.0%	0		
Worker	12.2%	466		53,030
Vendor	1.1%	42	4,112	
Hauling	1.2%	46	4,486	
Onsite Truck	0.0%	0		
Total	*99.8%*	*3,816*	*327,442*	*53,030*
Phase 1 Roadway - 2027				
Off-road	85.6%	3,265	319,813	
Electricity	0.0%	0		
Worker	12.0%	458		52,136
Vendor	1.1%	42	4,110	
Hauling	1.2%	46	4,483	
Onsite Truck	0.0%	0		
Total	*99.9%*	*3,815*	*328,406*	*52,136*
Phase 1 Roadway - 2028				
Off-road	85.9%	3,276	320,891	
Electricity	0.0%	0		
Worker	11.9%	454		51,694
Vendor	1.1%	42	4,109	
Hauling	1.2%	46	4,483	
Onsite Truck	0.0%	0		
Total	*100.1%*	*3,814*	*329,482*	*51,694*
Phase 1 Roadway - 2029				
Off-road	86.1%	3,266	319,848	
Electricity	0.0%	0		
Worker	11.7%	444		50,543
Vendor	1.1%	42	4,086	
Hauling	1.2%	46	4,458	
Onsite Truck	0.0%	0		
Total	*100.1%*	*3,793*	*328,392*	*50,543*
Phase 1 Roadway - 2030				
Off-road	85.3%	2,834	277,578	
Electricity	0.0%	0		
Worker	12.2%	405		46,166
Vendor	1.0%	33	3,254	
Hauling	1.5%	50	4,881	
Onsite Truck	0.0%	0		
Total	*100.0%*	*3,322*	*285,713*	*46,166*
Phase 1 Roadway - 2031				
Off-road	84.1%	2,397	234,784	
Electricity	0.0%	0		
Worker	13.0%	371		42,203
Vendor	0.9%	26	2,513	
Hauling	1.9%	54	5,304	
Onsite Truck	0.0%	0		
Total	*99.9%*	*2,850*	*242,600*	*42,203*
Phase 1 Roadway - 2032				
Off-road	83.4%	2,377	232,847	
Electricity	0.0%	0		
Worker	13.8%	393		44,804
Vendor	1.9%	54	5,305	
Hauling	0.9%	26	2,513	
Onsite Truck	0.0%	0		
Total	*100.0%*	*2,851*	*240,664*	*44,804*
Phase 1 Roadway - 2033				
Off-road	68.0%	1,475	144,458	
Electricity	0.0%	0		
Worker	15.5%	336		38,291
Vendor	1.1%	24	2,337	
Hauling	15.3%	332	32,503	
Onsite Truck	0.0%	0		
Total	*99.9%*	*2,169*	*179,298*	*38,291*
Phase 1 Roadway - 2034				
Off-road	37.5%	558	54,697	
Electricity	0.0%	0		
Worker	20.7%	308		35,110
Vendor	1.6%	24	2,334	
Hauling	40.2%	599	58,635	
Onsite Truck	0.0%	0		
Total	*100.0%*	*1,489*	*115,666*	*35,110*
Phase 1 Geothermal - 2025				
Off-road	69.5%	1,781	174,440	
Electricity	0.0%	0		
Worker	4.4%	113		12,842
Vendor	2.9%	74	7,279	
Hauling	23.2%	595	58,230	
Onsite Truck	0.0%	0		
Total	*100.0%*	*2,563*	*239,950*	*12,842*
Phase 1 Geothermal - 2026				
Off-road	70.0%	1,783	174,681	
Electricity	0.0%	0		
Worker	4.3%	110		12,478
Vendor	2.9%	74	7,237	
Hauling	22.8%	581	56,896	
Onsite Truck	0.0%	0		
Total	*100.0%*	*2,548*	*238,814*	*12,478*
Phase 1 Geothermal - 2027				
Off-road	70.4%	1,782	174,489	
Electricity	0.0%	0		
Worker	4.3%	109		12,394
Vendor	2.8%	71	6,940	
Hauling	22.5%	569	55,767	
Onsite Truck	0.0%	0		
Total	*100.0%*	*2,531*	*237,196*	*12,394*
Phase 1 Geothermal - 2028				
Off-road	70.9%	1,786	174,891	
Electricity	0.0%	0		
Worker	4.2%	106		12,048
Vendor	2.8%	71	6,907	
Hauling	22.1%	557	54,515	
Onsite Truck	0.0%	0		
Total	*100.0%*	*2,519*	*236,312*	*12,048*
Phase 1 Geothermal - 2029				
Off-road	71.4%	1,780	174,349	
Electricity	0.0%	0		
Worker	4.2%	105		11,926
Vendor	2.7%	67	6,593	
Hauling	21.6%	539	52,744	
Onsite Truck	0.0%	0		
Total	*99.9%*	*2,493*	*233,686*	*11,926*
Phase 1 Geothermal - 2030				
Off-road	71.9%	1,780	174,329	
Electricity	0.0%	0		
Worker	4.1%	101		11,560
Vendor	2.7%	67	6,546	
Hauling	21.2%	525	51,402	
Onsite Truck	0.0%	0		
Total	*99.9%*	*2,476*	*232,277*	*11,560*
Phase 1 Geothermal - 2031				
Off-road	72.4%	1,780	174,357	
Electricity	0.0%	0		
Worker	4.1%	101		11,482
Vendor	2.6%	64	6,261	
Hauling	20.9%	514	50,332	
Onsite Truck	0.0%	0		
Total	*100.0%*	*2,459*	*230,951*	*11,482*
Phase 1 Geothermal - 2032				
Off-road	72.9%	1,786	174,947	
Electricity	0.0%	0		
Worker	4.1%	100		11,442
Vendor	2.5%	61	6,000	
Hauling	20.5%	502	49,196	
Onsite Truck	0.0%	0		
Total	*100.0%*	*2,450*	*230,143*	*11,442*
Phase 1 Geothermal - 2033				
Off-road	73.3%	1,781	174,478	
Electricity	0.0%	0		
Worker	4.0%	97		11,072
Vendor	2.5%	61	5,951	
Hauling	20.2%	491	48,083	
Onsite Truck	0.0%	0		
Total	*100.0%*	*2,430*	*228,512*	*11,072*

Construction

Source	Percent	Total MTCO2	Diesel (Gallons)	Gasoline (Gallons)
Phase 2 - 2035				
Off-road	38.2%	5,882	576,060	
Electricity	0.0%	0		
Worker	35.3%	5,435		619,028
Vendor	25.8%	3,972	389,067	
Hauling	1.1%	169	16,588	
Onsite Truck	0.0%	0		
Total	*100.4%*	*15,397*	*981,715*	*619,028*
Phase 2 - 2036				
Off-road	38.2%	5,846	572,601	
Electricity	0.0%	0		
Worker	35.1%	5,372		611,825
Vendor	25.7%	3,933	385,232	
Hauling	1.1%	168	16,489	
Onsite Truck	0.0%	0		
Total	*100.1%*	*15,304*	*974,321*	*611,825*
Phase 2 - 2037				
Off-road	38.6%	5,844	572,358	
Electricity	0.0%	0		
Worker	34.9%	5,284		601,779
Vendor	25.4%	3,845	376,629	
Hauling	1.1%	167	16,311	
Onsite Truck	0.0%	0		
Total	*100.0%*	*15,139*	*965,298*	*601,779*
Phase 2 - 2038				
Off-road	39.1%	5,885	576,399	
Electricity	0.0%	0		
Worker	34.7%	5,223		594,850
Vendor	25.1%	3,778	370,016	
Hauling	1.1%	166	16,216	
Onsite Truck	0.0%	0		
Total	*100.0%*	*15,051*	*962,631*	*594,850*
Phase 2 - 2039				
Off-road	39.7%	5,937	581,469	
Electricity	0.0%	0		
Worker	34.5%	5,159		587,607
Vendor	24.8%	3,709	363,235	
Hauling	1.0%	150	14,647	
Onsite Truck	0.0%	0		
Total	*100.0%*	*14,954*	*959,351*	*587,607*
Phase 2 - 2040				
Off-road	40.2%	5,994	587,039	
Electricity	0.0%	0		
Worker	34.4%	5,129		584,158
Vendor	24.4%	3,638	356,312	
Hauling	1.0%	149	14,603	
Onsite Truck	0.0%	0		
Total	*100.0%*	*14,910*	*957,954*	*584,158*
Phase 2 - 2041				
Off-road	40.7%	6,021	589,721	
Electricity	0.0%	0		
Worker	34.3%	5,074		577,933
Vendor	23.9%	3,536	346,298	
Hauling	1.0%	148	14,489	
Onsite Truck	0.0%	0		
Total	*99.9%*	*14,794*	*950,508*	*577,933*
Phase 2 - 2042				
Off-road	41.3%	6,082	595,698	
Electricity	0.0%	0		
Worker	34.2%	5,036		573,632
Vendor	23.5%	3,461	338,957	
Hauling	1.0%	147	14,424	
Onsite Truck	0.0%	0		
Total	*100.0%*	*14,727*	*949,079*	*573,632*
Phase 2 - 2043				
Off-road	41.7%	6,116	599,056	
Electricity	0.0%	0		
Worker	34.1%	5,002		569,662
Vendor	23.1%	3,388	331,851	
Hauling	1.0%	147	14,366	
Onsite Truck	0.0%	0		
Total	*99.9%*	*14,668*	*945,273*	*569,662*
Phase 2 - 2044				
Off-road	42.2%	6,185	605,827	
Electricity	0.0%	0		
Worker	34.1%	4,998		569,274
Vendor	22.7%	3,327	325,883	
Hauling	1.0%	147	14,356	
Onsite Truck	0.0%	0		
Total	*100.0%*	*14,658*	*946,066*	*569,274*
Phase 2 - Roadways - 2035				
Off-road	45.6%	208	20,336	
Electricity	0.0%	0		
Worker	35.2%	160		18,254
Vendor	5.0%	23	2,230	
Hauling	14.1%	64	6,288	
Onsite Truck	0.0%	0		
Total	*99.9%*	*455*	*28,854*	*18,254*
Phase 2- Roadways - 2036				
Off-road	90.1%	3,265	319,781	
Electricity	0.0%	0		
Worker	8.2%	297		33,843
Vendor	0.9%	33	3,194	
Hauling	0.7%	25	2,484	
Onsite Truck	0.0%	0		
Total	*99.9%*	*3,624*	*325,460*	*33,843*
Phase 2- Roadways - 2037				
Off-road	90.2%	3,264	319,658	
Electricity	0.0%	0		
Worker	8.2%	297		33,793
Vendor	0.9%	33	3,189	
Hauling	0.7%	25	2,481	
Onsite Truck	0.0%	0		
Total	*100.0%*	*3,618*	*325,328*	*33,793*
Phase 2- Roadways - 2038				
Off-road	90.3%	3,265	319,798	
Electricity	0.0%	0		
Worker	8.1%	293		33,358
Vendor	0.9%	33	3,187	
Hauling	0.7%	25	2,479	
Onsite Truck	0.0%	0		
Total	*100.0%*	*3,616*	*325,464*	*33,358*
Phase 2- Roadways - 2039				
Off-road	90.7%	3,277	320,939	
Electricity	0.0%	0		
Worker	7.7%	278		31,684
Vendor	0.9%	33	3,185	
Hauling	0.7%	25	2,477	
Onsite Truck	0.0%	0		
Total	*100.0%*	*3,613*	*326,600*	*31,684*
Phase 2- Roadways - 2040				
Off-road	90.0%	2,839	278,041	
Electricity	0.0%	0		
Worker	8.4%	265		30,177
Vendor	0.8%	25	2,471	
Hauling	0.8%	25	2,471	
Onsite Truck	0.0%	0		
Total	*100.0%*	*3,154*	*282,984*	*30,177*
Phase 2- Roadways - 2041				
Off-road	89.5%	2,398	234,819	
Electricity	0.0%	0		
Worker	8.8%	236		26,849
Vendor	0.8%	21	2,099	
Hauling	0.9%	24	2,361	
Onsite Truck	0.0%	0		
Total	*100.0%*	*2,679*	*239,279*	*26,849*
Phase 2- Roadways - 2042				
Off-road	89.6%	2,399	234,932	
Electricity	0.0%	0		
Worker	8.8%	236		26,832
Vendor	0.7%	19	1,835	
Hauling	0.9%	24	2,360	
Onsite Truck	0.0%	0		
Total	*100.0%*	*2,677*	*239,127*	*26,832*
Phase 2 - Roadways- 2043				
Off-road	78.7%	1,476	144,568	
Electricity	0.0%	0		
Worker	11.2%	210		23,925
Vendor	1.1%	21	2,021	
Hauling	9.1%	171	16,716	
Onsite Truck	0.0%	0		
Total	*100.1%*	*1,876*	*163,304*	*23,925*
Phase 2 - Roadways- 2044				
Off-road	51.8%	558	54,672	

Operation

Type	Total	Units
Phase 2		
Petroleum	36,301,672	gallons/year
Electricity	5,834,810,398	kWh/year
Natural Gas	575,567,363	kBTU/year

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Constants

Fuel	KgCO2/Gallon	1000 Kg in MT
Gasoline	8.78	
Diesel	10.21	

Source: The Climate Registry 2021

Table 2.1 U.S. Default Factors for Calculating CO_2 Emissions from Combustion of Transport Fuels

Fuel Type	Carbon Content (Per Unit Energy)	Heat Content	Fraction Oxidized	CO_2 Emission Factor (Per Unit Volume)
Fuels Measured in Gallons	**kg C / MMBtu**	**MMBtu / barrel**		**kg CO_2 / gallon**
Gasoline	19.2	5.25	1	8.78
Diesel Fuel	20.2	5.80	1	10.21

Electricity	0.0%	0		
Worker	17.2%	185		21,110
Vendor	1.8%	19	1,900	
Hauling	29.2%	315	30,819	
Onsite Truck	0.0%	0		
Total	*100.0%*	*1,078*	*87,390*	*21,110*
Phase 2 - Geothermal - 2035				
Off-road	71.2%	890	87,198	
Electricity	0.0%	0		
Worker	3.8%	48		5,412
Vendor	2.3%	29	2,817	
Hauling	22.7%	284	27,800	
Onsite Truck	0.0%	0		
Total	*100.0%*	*1,250*	*117,815*	*5,412*
Phase 2- Geothermal - 2036				
Off-road	71.5%	893	87,471	
Electricity	0.0%	0		
Worker	3.8%	47		5,406
Vendor	2.2%	27	2,691	
Hauling	22.5%	281	27,526	
Onsite Truck	0.0%	0		
Total	*100.0%*	*1,249*	*117,689*	*5,406*
Phase 2- Geothermal - 2037				
Off-road	71.7%	890	87,190	
Electricity	0.0%	0		
Worker	3.8%	47		5,374
Vendor	2.2%	27	2,675	
Hauling	22.3%	277	27,118	
Onsite Truck	0.0%	0		
Total	*100.0%*	*1,242*	*116,983*	*5,374*
Phase 2- Geothermal - 2038				
Off-road	71.9%	891	87,221	
Electricity	0.0%	0		
Worker	3.8%	47		5,361
Vendor	2.2%	27	2,669	
Hauling	22.2%	275	26,931	
Onsite Truck	0.0%	0		
Total	*100.1%*	*1,239*	*116,821*	*5,361*
Phase 2- Geothermal - 2039				
Off-road	72.1%	891	87,260	
Electricity	0.0%	0		
Worker	3.7%	46		5,207
Vendor	2.1%	26	2,542	
Hauling	22.1%	273	26,747	
Onsite Truck	0.0%	0		
Total	*100.0%*	*1,236*	*116,548*	*5,207*
Phase 2- Geothermal - 2040				
Off-road	72.2%	893	87,449	
Electricity	0.0%	0		
Worker	3.7%	46		5,211
Vendor	2.1%	26	2,544	
Hauling	22.0%	272	26,646	
Onsite Truck	0.0%	0		
Total	*100.0%*	*1,237*	*116,639*	*5,211*

Total Proposed Project Construction Petroleum Demand

	Off-road	Hauling	Vendor	Worker
Phase 2				
2035	576,060	16,588	389,067	619,028
2036	572,601	16,489	385,232	611,825
2037	572,358	16,311	376,629	601,779
2038	576,399	16,216	370,016	594,850
2039	581,469	14,647	363,235	587,607
2040	587,039	14,603	356,312	584,158
2041	589,721	14,489	346,298	577,933
2042	595,698	14,424	338,957	573,632
2043	599,056	14,366	331,851	569,662
2044	605,827	14,356	325,883	569,274
Subtotal	*5,856,229*	*152,488*	*3,583,480*	*5,889,748*
Phase 2 - Roadways				
2035	20,336	6,288	2,230	18,254
2036	319,781	2,484	3,194	33,843
2037	319,658	2,481	3,189	33,793
2038	319,798	2,479	3,187	33,358
2039	320,939	2,477	3,185	31,684
2040	278,041	2,471	2,471	30,177
2041	234,819	2,361	2,099	26,849
2042	234,932	2,360	1,835	26,832
2043	144,568	16,716	2,021	23,925
2044	54,672	30,819	1,900	21,110
Subtotal	*2,247,542*	*70,937*	*25,312*	*279,825*
Phase 2 - Geothermal				
2035	87,198	27,800	2,817	5,412
2036	87,471	27,526	2,691	5,406
2037	87,190	27,118	2,675	5,374
2038	87,221	26,931	2,669	5,361
2039	87,260	26,747	2,542	5,207
2040	87,449	26,646	2,544	5,211
Subtotal	*523,789*	*162,768*	*15,937*	*31,970*
Phase Subtotals				
	Off-road	**Hauling**	**Vendor**	**Worker**
	8,627,559	***386,192***	***3,624,729***	**6,201,543**
		12,638,481		*6,201,543*

total			18,840,024
Phase Total		check	
Total Diesel	12,638,481	*12,638,481*	0
Total Gasoline	6,201,543	*6,201,543*	

Construction

Source	Percent	Total MTCO2	Diesel (Gallons)	Gasoline (Gallons)
Phase 3 - 2045				
Off-road	56.8%	6,892	675,003	
Electricity	0.0%	0		
Worker	35.3%	4,283		487,824
Vendor	25.8%	3,130	306,603	
Hauling	1.1%	133	13,072	
Onsite Truck	0.0%	0		
Total	*119.0%*	*12,133*	*994,678*	*487,824*
Phase 3 - 2046				
Off-road	38.2%	4,625	453,023	
Electricity	0.0%	0		
Worker	35.1%	4,250		484,055
Vendor	25.7%	3,112	304,782	
Hauling	1.1%	133	13,045	
Onsite Truck	0.0%	0		
Total	*100.1%*	*12,108*	*770,850*	*484,055*
Phase 3 - 2047				
Off-road	38.6%	4,665	456,932	
Electricity	0.0%	0		
Worker	34.9%	4,218		480,420
Vendor	25.4%	3,070	300,675	
Hauling	1.1%	133	13,021	
Onsite Truck	0.0%	0		
Total	*100.0%*	*12,086*	*770,629*	*480,420*
Phase 3 - 2048				
Off-road	39.1%	4,731	463,414	
Electricity	0.0%	0		
Worker	34.7%	4,199		478,248
Vendor	25.1%	3,037	297,486	
Hauling	1.1%	133	13,037	
Onsite Truck	0.0%	0		
Total	*100.0%*	*12,101*	*773,937*	*478,248*
Phase 3 - 2049				
Off-road	39.7%	4,785	468,657	
Electricity	0.0%	0		
Worker	34.5%	4,158		473,604
Vendor	24.8%	2,989	292,763	
Hauling	1.0%	121	11,805	
Onsite Truck	0.0%	0		
Total	*100.0%*	*12,053*	*773,225*	*473,604*
Phase 3 - 2050				
Off-road	40.2%	4,878	477,731	
Electricity	0.0%	0		
Worker	34.4%	4,174		475,386
Vendor	24.4%	2,961	289,966	
Hauling	1.0%	121	11,884	
Onsite Truck	0.0%	0		
Total	*100.0%*	*12,133*	*779,580*	*475,386*
Phase 3 - 2051				
Off-road	40.7%	4,928	482,671	
Electricity	0.0%	0		
Worker	34.3%	4,153		473,023
Vendor	23.9%	2,894	283,436	
Hauling	1.0%	121	11,859	
Onsite Truck	0.0%	0		
Total	*99.9%*	*12,108*	*777,966*	*473,023*
Phase 3 - 2052				
Off-road	41.3%	4,992	488,893	
Electricity	0.0%	0		
Worker	34.2%	4,133		470,784
Vendor	23.5%	2,840	278,184	
Hauling	1.0%	121	11,838	
Onsite Truck	0.0%	0		
Total	*100.0%*	*12,086*	*778,915*	*470,784*
Phase 2 - 2043				
Off-road	41.7%	6,116	599,056	
Electricity	0.0%	0		
Worker	34.1%	5,002		569,662
Vendor	23.1%	3,388	331,851	
Hauling	1.0%	147	14,366	
Onsite Truck	0.0%	0		
Total	*99.9%*	*14,668*	*945,273*	*569,662*
Phase 3- 2054				
Off-road	42.2%	5,086	498,169	
Electricity	0.0%	0		
Worker	34.1%	4,110		468,113
Vendor	22.7%	2,736	267,973	
Hauling	1.0%	121	11,805	
Onsite Truck	0.0%	0		
Total	*100.0%*	*12,053*	*777,947*	*468,113*
Phase 3 - Roadways - 2045				
Off-road	54.4%	208	20,337	
Electricity	0.0%	0		
Worker	27.4%	105		11,912
Vendor	5.3%	20	1,981	
Hauling	12.8%	49	4,785	
Onsite Truck	0.0%	0		
Total	*99.9%*	*382*	*27,104*	*11,912*
Phase 3- Roadways - 2046				
Off-road	92.1%	3,257	319,033	
Electricity	0.0%	0		
Worker	6.7%	237		26,989
Vendor	0.8%	28	2,771	
Hauling	0.3%	11	1,039	
Onsite Truck	0.0%	0		
Total	*99.9%*	*3,537*	*322,843*	*26,989*
Phase 3- Roadways - 2047				
Off-road	92.1%	3,264	319,659	
Electricity	0.0%	0		
Worker	6.7%	237		27,042
Vendor	0.8%	28	2,777	
Hauling	0.3%	11	1,041	
Onsite Truck	0.0%	0		
Total	*99.9%*	*3,544*	*323,477*	*27,042*
Phase 3- Roadways - 2048				
Off-road	92.2%	3,275	320,762	
Electricity	0.0%	0		
Worker	6.6%	234		26,701
Vendor	0.8%	28	2,783	
Hauling	0.3%	11	1,044	
Onsite Truck	0.0%	0		
Total	*99.9%*	*3,552*	*324,589*	*26,701*
Phase 3- Roadways - 2049				
Off-road	92.2%	3,265	319,776	
Electricity	0.0%	0		
Worker	6.6%	234		26,619
Vendor	0.8%	28	2,775	
Hauling	0.3%	11	1,040	
Onsite Truck	0.0%	0		
Total	*99.9%*	*3,541*	*323,591*	*26,619*
Phase 3 - Roadways - 2050				
Off-road	91.9%	2,834	277,581	
Electricity	0.0%	0		
Worker	6.8%	210		23,884
Vendor	0.8%	25	2,416	
Hauling	0.6%	19	1,812	
Onsite Truck	0.0%	0		
Total	*100.1%*	*3,084*	*281,809*	*23,884*
Phase 3 - Roadways - 2051				
Off-road	91.4%	2,399	234,918	
Electricity	0.0%	0		
Worker	7.0%	184		20,922
Vendor	0.7%	18	1,799	
Hauling	0.9%	24	2,313	
Onsite Truck	0.0%	0		
Total	*100.0%*	*2,624*	*239,030*	*20,922*
Phase 3 - Roadways - 2052				
Off-road	91.4%	2,405	235,513	
Electricity	0.0%	0		
Worker	7.0%	184		20,975
Vendor	0.7%	18	1,804	
Hauling	0.9%	24	2,319	
Onsite Truck	0.0%	0		
Total	*100.0%*	*2,631*	*239,636*	*20,975*
Phase 3 - Roadways- 2053				
Off-road	83.1%	1,475	144,496	
Electricity	0.0%	0		
Worker	9.0%	160		18,198
Vendor	1.1%	20	1,913	
Hauling	6.8%	121	11,824	
Onsite Truck	0.0%	0		
Total	*100.0%*	*1,775*	*158,233*	*18,198*
Phase 3 - Roadways- 2054				
Off-road	60.0%	559	54,734	

Operation

Type	Total	Units
Phase 3		
Petroleum	36,301,672	gallons/year
Electricity	7,634,942,548	kWh/year
Natural Gas	597,165,464	kBTU/year

UPDATED 7/1/2025

Constants		
Fuel	**KgCO2/Gallon**	1000 Kg in MT
Gasoline	8.78	
Diesel	10.21	

Source: The Climate Registry 2021

Table 2.1 U.S. Default Factors for Calculating CO_2 Emissions from Combustion of Transport Fuels

Fuel Type	Carbon Content (Per Unit Energy)	Heat Content	Fraction Oxidized	CO_2 Emission Factor (Per Unit Volume)
Fuels Measured in Gallons	**kg C / MMBtu**	**MMBtu / barrel**		**kg CO_2 / gallon**
Gasoline	19.2	5.25	1	8.78
Diesel Fuel	20.2	5.80	1	10.21

Electricity	0.0%	0		
Worker	14.8%	138		15,700
Vendor	2.0%	19	1,824	
Hauling	23.2%	216	21,164	
Onsite Truck	0.0%	0		
Total	*100.0%*	*931*	*77,723*	*15,700*
Phase 3 - Geothermal - 2045				
Off-road	72.6%	890	87,207	
Electricity	0.0%	0		
Worker	3.7%	45		5,168
Vendor	2.0%	25	2,402	
Hauling	21.8%	267	26,186	
Onsite Truck	0.0%	0		
Total	*100.1%*	*1,226*	*115,796*	*5,168*
Phase 3 - Geothermal - 2046				
Off-road	72.7%	891	87,274	
Electricity	0.0%	0		
Worker	3.6%	44		5,026
Vendor	2.0%	25	2,401	
Hauling	21.7%	266	26,050	
Onsite Truck	0.0%	0		
Total	*100.0%*	*1,226*	*115,725*	*5,026*
Phase 3- Geothermal - 2047				
Off-road	72.7%	891	87,229	
Electricity	0.0%	0		
Worker	3.6%	44		5,023
Vendor	1.9%	23	2,280	
Hauling	21.7%	266	26,037	
Onsite Truck	0.0%	0		
Total	*99.9%*	*1,225*	*115,546*	*5,023*

Total Proposed Project Construction Petroleum Demand

	Off-road	Hauling	Vendor	Worker
Phase 3				
2045	675,003	13,072	306,603	487,824
2046	453,023	13,045	304,782	484,055
2047	456,932	13,021	300,675	480,420
2048	463,414	13,037	297,486	478,248
2049	468,657	11,805	292,763	473,604
2050	477,731	11,884	289,966	475,386
2051	482,671	11,859	283,436	473,023
2052	488,893	11,838	278,184	470,784
2053	599,056	14,366	331,851	569,662
2054	498,169	11,805	267,973	468,113
Subtotal	*5,063,549*	*125,732*	*2,953,719*	*4,861,117*
Phase 3 - Roadways				
2045	20,337	4,785	1,981	11,912
2046	319,033	1,039	2,771	26,989
2047	319,659	1,041	2,777	27,042
2048	320,762	1,044	2,783	26,701
2049	319,776	1,040	2,775	26,619
2050	277,581	1,812	2,416	23,884
2051	234,918	2,313	1,799	20,922
2052	235,513	2,319	1,804	20,975
2053	144,496	11,824	1,913	18,198
2054	54,734	21,164	1,824	15,700
Subtotal	*2,246,809*	*48,382*	*22,843*	*218,941*
Phase 3 - Geothermal				
2045	87,207	26,186	2,402	5,168
2046	87,274	26,050	2,401	5,026
2047	87,229	26,037	2,280	5,023
Subtotal	*261,711*	*78,273*	*7,083*	*15,217*
Phase Subtotals				
	Off-road	**Hauling**	**Vendor**	**Worker**
	7,572,068	***252,388***	***2,983,646***	**5,095,276**
		10,808,102		*5,095,276*
Phase Total			check	
Total Diesel	10,808,102		*10,808,102*	0
Total Gasoline	5,095,276		*5,095,276*	

total	15,903,377