11.12 Energy Assessment

Westside Annexation and North Lancaster Industrial Specific Plan

ENERGY ANALYSIS

CITY OF LANCASTER

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LIST OF ABBREVIATED TERMS

(1)	Reference
AQIA	Air Quality Impact Analysis
BACM	Best Available Control Measures
CalEEMod	California Emissions Estimator Model
CARB	California Air Resources Board
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CPUC	California Public Utilities Commission
DMV	Department of Motor Vehicles
EIA	Energy Information Administration
EIR	Environmental Impact Report
EMFAC	Emissions Factor
FERC	Federal Energy Regulatory Commission
GPA	General Plan Amendment
GS-1	General Service Rate Schedule
GWh	Gigawatt Hour
HHDT	Heavy-Heavy Duty
Hp-hr-gal	Horsepower-Hour Per Gallon
IEPR	Integrative Energy Policy Report
ISO	Independent Service Operator
ISTEA	Intermodal Surface Transportation Efficiency Act
ITE	Institute of Transportation Engineers
kBTU	Kilo-British Thermal Units
kWh	Kilowatt Hour
LDA	Light Duty Auto
LDT1/LDT2	Light-Duty Trucks
MDAB	Mojave Desert Air Basin
MDV	Medium Duty Trucks
MHDT	Medium-Heavy Duty Trucks
mpg	Miles Per Gallon
MPO	Metropolitan Planning Organization
PG&E	Pacific Gas and Electric
Project	Westside Annexation and North Lancaster Industrial Specific Plan
SCE	Southern California Edison
SDAB	San Diego Air Basin

SDG&E	San Diego Gas and Electric
sf	Square Feet
SoCalGas	Southern California Gas
SW Gas	Southwest Gas Company
TEA-21	Transportation Equity Act for the 21st Century
VMT	Vehicle Miles Traveled

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EXECUTIVE SUMMARY

ES.1 SUMMARY OF FINDINGS

The results of this *Westside Annexation and North Lancaster Industrial Specific Plan Energy Analysis* are summarized below based on the significance criteria in Section 3 of this report consistent with Appendix G of the California Environmental Quality Act (CEQA) Guidelines (1). Table ES-1 shows the findings of significance for potential energy impacts under CEQA.

TABLE ES-1: SUMMARY OF CEQA SIGNIFICANCE FINDINGS

Analysis	Report Section	Significance Findings	
		Unmitigated	Mitigated
Energy Impact #1: Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation.	5.0	*Less Than Significant*	*n/a*
Energy Impact #2: Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.	5.0	*Less Than Significant*	*n/a*

ES.2 MITIGATION MEASURES/REGULATORY REQUIREMENTS

Because the proposed Project does not result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation nor does it conflict with or obstruct a state or local plan for renewable energy or energy efficiency, impacts would be less than significant, and no mitigation is required.

The following measures were identified in the *Westside Annexation and North Lancaster Industrial Specific Plan Air Quality Impact Analysis* (*AQIA*) report (2). Although these measures are designed to reduce Project air quality emissions, they would also assist in the reduction of fuel and energy usage.

SPECIFIC PLAN AREA ONLY

MM AQ-4

Provision of Electrical Infrastructure for Construction and Use of Electric Construction Equipment. After the grading phase of Project construction, the developer/contractor shall provide temporary electrical hook ups to the power grid, rather than diesel-fueled generators, for contractors' electric construction tools, such as saws, drills, and compressors. The use of diesel-fueled generators for on-site construction activities shall be prohibited unless electrical infrastructure is not yet available on the Project site. Diesel-fueled generators may be used for off-site construction work. All off-road equipment with a power rating below 19 kilowatts (e.g., plate compactors, pressure washers) used during Project construction must be electric powered, where feasible. The developer/applicant shall include these requirements in applicable bid documents, purchase orders, and contracts with successful contractors.

MM AQ-5

Construction Equipment Idling Restrictions. The idling of heavy construction equipment for more than 5 minutes shall be prohibited. Signage shall be posted throughout the construction site informing construction personnel of the idling time limit. Idling time limits shall be noted in construction specifications. Subject to all other idling restrictions, heavy construction equipment shall not be left in the “on position” for more than 10 hours per day.

MM AQ-8

Construction Waste Recycling and Management. Consistent with Section 5.408.1 of the CALGreen Code Part 11, a minimum of 65 percent of the nonhazardous construction and demolition waste shall be recycled and/or salvaged for reuse.

MM AQ-10

Prior to the issuing of each building permit, a Project Applicant and its contractors shall provide plans and specifications to the City of Lancaster Building and Safety Division that demonstrate that each project building is designed for passive heating and cooling and is designed to include natural light. Features designed to achieve this shall include the proper placement of windows, overhangs, and skylights, where feasible.

MM AQ-11

Sustainable Design/LEED Measures. The Project shall be designed so that it is able to achieve LEED certification, or equivalent, at the time of building permit application. Documentation shall be provided to the City of Lancaster demonstrating that the Project meets this requirement prior to the issuance of building permits.

MM AQ-12

Electrical Infrastructure for Electric Equipment and Vehicles. The Project shall be designed to include electrical infrastructure to accommodate the required number of electric vehicle charging stations, the anticipated number charging stations for electric cargo handling equipment where applicable, and the potential installation of additional automobile and truck electric vehicle charging stations per Title 24, Part 11 (California Green Building Standards (CALGreen). The Project’s electrical rooms shall be of sufficient size to accommodate the upsizing of electrical equipment to accommodate potential future electrical loads.

MM AQ-13

Sustainable Energy, Waste, and Water Design Measures. A Project Applicant or successor in interest shall implement the following measures:

- The Project's landscape plan shall emphasize drought-tolerant plants and use water-efficient irrigation techniques.
- All heating, cooling, lighting, and appliance fixtures shall be Energy Star-rated.
- All fixtures installed in restrooms and employee break areas shall be U.S. Environmental Protection Agency (U.S. EPA) WaterSense certified or equivalent.
- Structures shall be equipped with outdoor electric outlets in the front and rear of the structures to facilitate use of electrical lawn and garden equipment where feasible.
- Storage areas shall be provided for recyclables and green waste, as well as food waste storage if a pick-up service is available.
- Buildings shall include high-efficiency particulate air (HEPA) filtration systems within in all warehouse facilities, where feasible.
- The roof shall provide R-30 insulation to decrease overall energy consumption and increase occupant comfort, where feasible.
- Solar-powered water heaters shall be installed on the Project site, where feasible.
- A timer system for lighting to ensure that lights shall be switched off during times of non-operation shall be installed on the Project site.

MM AQ-15

Measures to Reduce the Urban Heat Island Effect. The following measures shall be implemented to reduce the urban heat island effect:

- The Project's roof structures shall be designed to include "cool roof" materials with a minimum aged reflectance and thermal emittance values that are equal to or greater than those specified in the current edition of CALGreen, Table A5.106.11.2.3 for Tier 1 standards.
- Sufficient shade trees shall be provided throughout the Project site so that at least 50% of the automobile parking areas will be shaded within 15 years after Project construction is complete (excluding the truck courts where trees cannot be planted due to interference with truck maneuvering).

MM AQ-16

Zero-Emission Equipment. 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 the Project are informed of the following operational responsibility:

- All equipment and appliances operating on the Project site shall be zero-emission equipment, where economically feasible and commercially available, as reasonably determined by the Lead Agency. This requirement shall apply to indoor and outdoor equipment such as forklifts, handheld landscaping equipment, yard equipment, office appliances, etc. The building manager or their designee shall be responsible for enforcing these requirements.

MM AQ-17

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

- Signage. Legible, durable, weather-proof signs shall be placed at truck access gates, loading docks, and truck parking areas that identify the Project's three-minute idling restriction. 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 CARB to report violations; and (4) that penalties apply for violations.
- 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.
- Anti-Idling Training. Tenants and operators on the 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, one-day Course #512).

MM AQ-19

Provision of Information Regarding Programs to Reduce Emissions from Trucks. Prior to tenant occupancy, all Project Applicants or successors in interest shall provide documentation to the City of Lancaster demonstrating that occupants/tenants of the Project site have been provided informational documentation regarding:

- Funding opportunities that provide incentives for using cleaner than-required engines and equipment, such as the Carl Moyer Program and Voucher Incentive Program. The U.S. EPA SmartWay Program, which assists freight shippers, carriers, logistics companies, and other stakeholder partner with the U.S. EPA to measure, benchmark, and improve logistics operations and reduce air pollutant emissions from transport of cargo.

MM AQ-20

Provision of Information Regarding Reducing Emissions from Area and Energy Sources. Prior to tenant occupancy, a Project Applicant or successor in interest shall provide documentation to the City of Lancaster demonstrating that occupants/tenants of the Project site have been provided informational documentation regarding:

- Information regarding energy efficiency, energy-efficient lighting and lighting control systems, energy management, and existing energy incentive programs.
- Information regarding and a recommendation to use cleaning products that are water-based or containing low quantities of volatile organic compounds.

- Information regarding and a recommendation to use electric or alternatively fueled sweepers with HEPA filters.
- Information regarding on-site meal options, such as food trucks, will be provided to employees.

MM AQ-21

Solar Power. At a minimum, the roofs of the warehouse buildings shall be designed to provide the structural capacity to accommodate roof-top solar panels. The Project shall be capable of including rooftop solar panels that generate sufficient power to meet at least 50% of the Project's total operational base energy requirements from within the Project's building envelope.

MM AQ-22

All project applicants or successors in interest shall require tenants to use zero-emission light- and medium-duty trucks as part of business operations, if such trucks are economically feasible and commercially available, as reasonably determined by the Lead Agency.

MM AQ-23

The Project Applicant/Developer shall install all necessary infrastructure (i.e., wiring, reinforced roofs) to allow solar photovoltaic systems on the project site to be installed in the future, with a specified electrical generation capacity in order to meet California Green Building Code Standards.

MM AQ-24

The Project shall meet CalGreen Tier 2 green building standards, including all provisions related to designated parking for clean air vehicles, electric vehicle charging, and bicycle parking.

MM AQ-26

Provide drought tolerant low-water landscaping and trees throughout the Project site and use recycled (purple pipe) irrigation water with drip irrigation and weather based smart irrigation controllers.

MM AQ-27

Prior to the issuance of building permits, all Project Applicants or successors in interest shall provide documentation to the City of Lancaster demonstrating that the Project is designed to achieve energy efficient buildings exceeding Title 24 standards with the following design criteria:

- Building envelope insulation of conditioned space within all commercial and industrial buildings shall be R30 or greater for attics/roofs.
- All roofing material for commercial buildings shall be CRRC Rated 0.15 aged solar reflectance or greater and 0.75 thermal emittance.

- Lighting within the commercial and industrial buildings shall be high efficiency LED lighting with a minimum of 40 lumens/watt for 15 watt or less fixtures, 50 lumens/watt for 15–40-watt fixtures, and 60 lumens/watt for fixtures greater than 40 watts.

MM AQ-28

All water fixtures shall be water efficient (toilets/urinals [1.28/0.125 gallons per flush or less], showerheads [1.8 gallons per minute or less], and faucets [1.8 gallons per minute or less]).

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1 INTRODUCTION

This report presents the results of the energy analysis prepared by Urban Crossroads, Inc., for the proposed Westside Annexation and North Lancaster Industrial Specific Plan (Project). The purpose of this report is to ensure that energy implication is considered by the City of Lancaster, as the lead agency, and to quantify anticipated energy usage associated with construction of the proposed Project, determine if the usage amounts are efficient, typical, or wasteful for the land use type, and to emphasize avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy.

1.1 SITE LOCATION

The Project site encompasses approximately 7,153 acres in the Antelope Valley portion of unincorporated Los Angeles County, as shown on Exhibit 1-A. The site is generally bound by Avenue B to the north, Sierra Highway and Edwards Air Force Base to the east, Avenue G to the south, and 30th Street West to the west. SR-14, Sierra Highway, 10th Street West, and 20th Street West transect the site in a north-south direction. Unincorporated Los Angeles County surrounds the Project site to the north, east, and west. The City of Lancaster (City) is located to the south and west of the site.

1.2 PROJECT DESCRIPTION

The proposed Project involves two components: 1) annexation of the Project site from unincorporated Los Angeles County into the City of Lancaster jurisdiction and 2) adoption of the proposed North Lancaster Industrial Specific Plan (SP), which would allow up to approximately 38.5 million square feet (sf) of industrial development. The Project site encompasses approximately 7,153 acres in the Antelope Valley area of unincorporated Los Angeles County.

ANNEXATION AREA (ANX24-002)

The proposed Project includes annexation of approximately 7,153 acres currently in unincorporated Los Angeles County into the City's jurisdiction. There are six land use areas proposed within the Annexation Area: non-urban residential uses, multifamily residential (mobile home), mixed use (residential with retail, office, or service uses), light industrial, public uses, and the proposed SP. Exhibit 1-A identifies the proposed land use areas within the Annexation Area. The uses proposed within the Annexation Area (which does not include the Specific Plan Area) are summarized below:

- 5,793,480 sf of Industrial Park uses
- 3,620,925 sf of Warehousing uses
- 3,620,925 sf of High-Cube Parcel Hub uses
- 1,448,370 sf of High-Cube Cold Storage uses
- 719 Single Family Detached dwelling units (DUs)
- 683 Multifamily (Low-Rise) Residential DUs

- 435 Mobile Home Park DUs
- 1,110,780 sf of Business Park uses

SPECIFIC PLAN (SP24-002)

The North Lancaster Industrial Specific Plan would encompass approximately 1,860 acres in the central portion of the annexation area. The Specific Plan is proposed to allow for a site-specific land use plan, development standards, design guidelines, infrastructure systems, and implementation strategies on which subsequent development activities would be implemented. Exhibit 1-B illustrates the proposed land use plan for the Specific Plan area. As shown, the Specific Plan area would be separated into eight planning areas with Light Industrial and Heavy Industrial land use designations. The uses proposed within the Specific Plan area are summarized below:

Within Planning Areas (PA) 2, 4, 6 (eastern half), 7, and 8, 11.3 million square feet of industrial warehouse buildings and associated site improvements are proposed.[1]. The proposed development would be constructed over a six-year duration. Planning Areas 1, 3, and 5 total 949.4 acres and would allow for up to 20,677,934 sf of development. A total of 2,015,072 square feet of warehouse space was previously approved in PA 6 (western half). Its emissions are disclosed below.

PAs 2, 4, 6 (eastern half), 7 and 8 are anticipated to have an opening year of 2031. This analysis also evaluates emissions that would occur at buildout of the Annexation Areas and the remaining Specific Plan Planning Areas combined, with an assumed buildout year of 2040. At the time this analysis was prepared, the future tenants of the proposed Project were unknown, and therefore, this study includes a conservative analysis of the proposed Project uses.

[1] The western half of PA 6 has been previously entitled and its impacts analyzed in a previously approved CEQA document. However, energy usage for the western half of PA 6 have been estimated as part of this analysis for disclosure purposes and are presented in Section 4.4 of this report.

EXHIBIT 1-A: ANNEXATION AREA

LAND USE	LA COUNTY DESIGNATIONS	LANCASTER GP DESIGNATIONS	LANCASTER ZONING DESIGNATIONS
1 314 Acres	RL-20 RESIDENTIAL 1 DU/20 AC., EQUESTRIAN, AG USES	NU (NON-URBAN RESIDENTIAL 1 DU/2.5 AC. TO 2 DU/AC.	RR-2.5 (RURAL RESIDENTIAL 2.5, 1 DU/ 100,000 SF)
2 1,760 Acres	RL-10 RESIDENTIAL 1 DU/10 AC., EQUESTRIAN, AG USES	NU (NON-URBAN RESIDENTIAL 1 DU/2.5 AC. TO 2 DU/AC.	RR-2.5 (RURAL RESIDENTIAL 2.5, 1 DU/ 100,000 SF)
5 408 Acres	MU-R MIXED USE RURAL LOW INTENSITY COMMERCIAL, RESIDENTIAL	MU (MIXED USE) 21 DU/AC., 1.0 FAR RETAIL, OFFICE, SERVICE USES	MU-E (MIXED USE-EMPLOYMENT)
6 1,330 Acres	IL LIGHT INDUSTRIAL, 1.0 FAR, LIGHT MANUFACTURING, WAREHOUSES	LI LIGHT INDUSTRY	LI LIGHT INDUSTRY
8 1,415 Acres	P PUBLIC USES	P PUBLIC USES	P PUBLIC USES
9 70 Acres	RL-10 RESIDENTIAL 1 DU/10 AC., EQUESTRIAN, AG USE	MR1 MULTIPLE FAMILY RESIDENTIAL	MHP MOBILE HOME PARK
10 1,864 Acres	IL LIGHT INDUSTRIAL, 1.0 FAR, LIGHT MANUFACTURING, WAREHOUSES	SP SPECIFIC PLAN	SP SPECIFIC PLAN

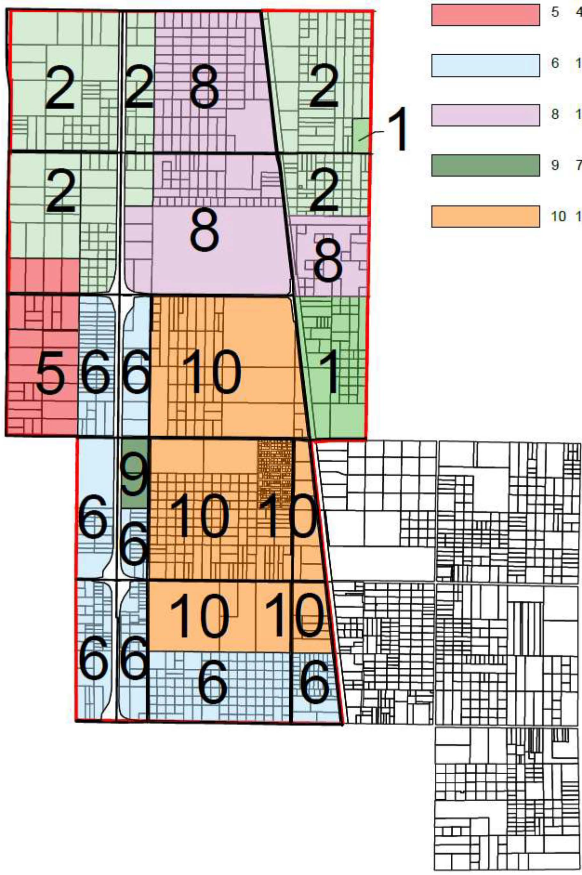
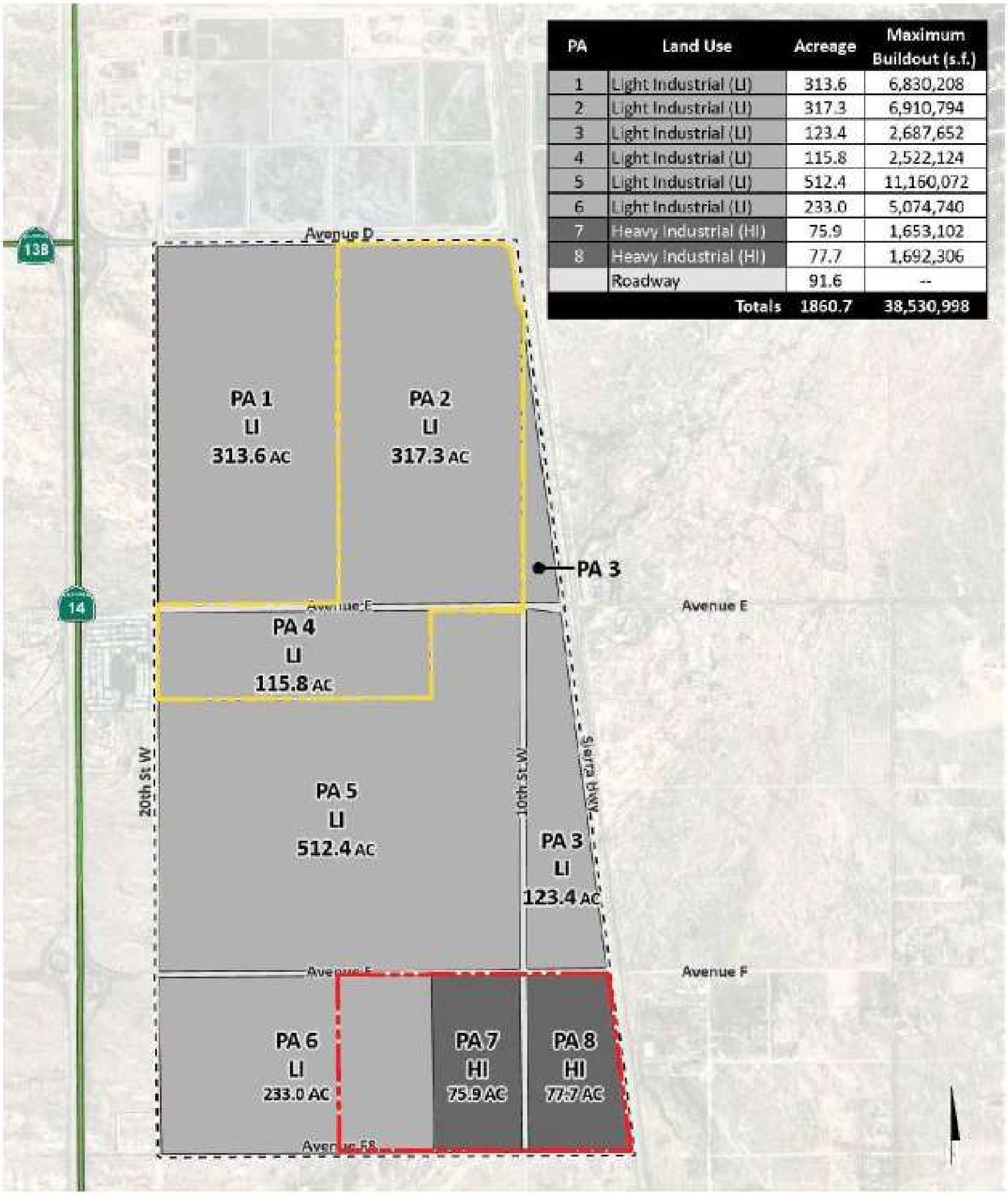


EXHIBIT 1-B: NORTH LANCASTER INDUSTRIAL SPECIFIC PLAN LAND USE PLAN



PA	Land Use	Acreage	Maximum Buildout (s.f.)
1	Light Industrial (LI)	313.6	6,830,208
2	Light Industrial (LI)	317.3	6,910,794
3	Light Industrial (LI)	123.4	2,687,652
4	Light Industrial (LI)	115.8	2,522,124
5	Light Industrial (LI)	512.4	11,160,072
6	Light Industrial (LI)	233.0	5,074,740
7	Heavy Industrial (HI)	75.9	1,653,102
8	Heavy Industrial (HI)	77.7	1,692,306
	Roadway	91.6	--
	Totals	1860.7	38,530,998

LEGEND:

PAs 2 & 4 Project Boundary

PAs 6 (East Half), 7 & 8 Project Boundary

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2 EXISTING CONDITIONS

This section provides an overview of the existing energy conditions in the Project region.

2.1 OVERVIEW

The most recent data for California's estimated total energy consumption and natural gas consumption is from 2022, released by the United States (U.S.) Energy Information Administration's (EIA) California State Profile and Energy Estimates and includes (3):

As of 2022, approximately 6,882 trillion British Thermal Unit (BTU) of energy was consumed

As of 2022, approximately 628 million barrels of petroleum

As of 2022, approximately 2,059 billion cubic feet of natural gas

As of 2022, approximately 1,322 thousand short tons of coal

According to the EIA, in 2022 the U.S. petroleum consumption comprised about 90% of all transportation energy use, excluding fuel consumed for aviation and most marine vessels (4). In 2023, about 253,289 million gallons (or about 6.031 million barrels) of finished petroleum products were consumed in the U.S., an average of about 694 million gallons per day (or about 16.5 million barrels per day) (5). In 2021, California consumed approximately 12,157 million gallons in motor gasoline (33.31 million per day) and approximately 3,541 million gallons of diesel fuel (9.7 million per day) (6).

The most recent data provided by the EIA for energy use in California is reported from 2022 which shows approximate energy usage by each of the following sectors:

42.6% for transportation uses

22.5% for industrial uses

17.6% for residential uses

17.4% for commercial uses (7)

According to the EIA, California used approximately 251,869 gigawatt hours of electricity in 2022 (8). By sector in 2022, residential uses utilized 35.6% of the state's electricity, followed by 45.3% for commercial uses, 18.9% for industrial uses, and 0.3% for transportation. Electricity usage in California for differing land uses varies substantially by the type of uses in a building, type of construction materials used in a building, and the efficiency of all electricity-consuming devices within a building (8).

According to the EIA, California used approximately 200,871 million therms of natural gas in 2023 (9). In 2023 (the most recent year for which data is available), by sector, industrial uses utilized 31% of the state's natural gas, followed by 32% used as fuel in the electric power sector, 23% from residential, 13% from commercial, 1% from transportation uses and the remaining 3% was utilized for the operations, processing and production of natural gas itself (9). While the supply of natural gas in the United States and production in the lower 48 states has increased greatly since 2008, California produces little, and imports 90% of its supply of natural gas (9).

In 2023, total system electric generation for California was 281,140 gigawatt hours (GWh). California's massive electricity in-state generation system generated approximately 215,623 GWh which accounted for approximately 76% of the electricity it uses; the rest was imported from the Pacific Northwest (6%) and the U.S. Southwest (18%) (10). Natural gas is the main source for electricity generation at 43.68% of the total in-state electric generation system power as shown in Table 2-1.

An updated summary of, and context for energy consumption and energy demands within the State is presented in "U.S. Energy Information Administration, California State Profile and Energy Estimates, Quick Facts" excerpted below (11):

- In 2023, California was the seventh-largest producer of crude oil among the 50 states, and the state ranked third in crude oil refining capacity.
- California is the largest consumer of jet fuel and second-largest consumer of motor gasoline among the 50 states.
- California is the second-largest total energy consumer among the states, after Texas, but its per capita energy consumption is the fourth-lowest in the nation.
- In 2023, renewable resources, including hydroelectric power and small-scale solar power, supplied 54% of California's in-state electricity generation. Natural gas fueled another 39% and nuclear power provided almost all the rest.
- In 2023, California was the fourth-largest electricity producer in the nation. It is also the nation's third-largest electricity consumer and imports more electricity than any other state.

As indicated below, California is one of the nation's leading energy-producing states, and California's per capita energy use is among the nation's most efficient. Given the nature of the Project, the remainder of this discussion will focus on the three sources of energy that are most relevant to the Project—namely, electricity, natural gas, and transportation fuel for vehicle trips associated with the uses planned for the Project.

TABLE 2-1: TOTAL ELECTRICITY SYSTEM POWER (CALIFORNIA 2023)

Fuel Type	California In-State Generation (GWh)	% of California In-State Generation	Northwest Imports (GWh)	Southwest Imports (GWh)	Total Imports (GWh)	Total California Energy Mix (GWh)	Total California Power Mix
Coal	257	0.12%	163	4,561	4,724	4,981	1.77%
Natural Gas	94,192	43.68%	52	8,530	8,582	102,774	36.56%
Oil	36	0.02%	0	0	0	36	0.01%
Other (Waste Heat/Petroleum Coke)	206	0.10%	0	0	0	206	0.07%
Unspecified	0	0.00%	100	10,273	10,373	10,373	3.69%
Total Thermal and Unspecified	***94,691***	***43.92%***	***315***	***23,364***	***23,679***	***118,370***	***42.10%***
Nuclear	17,714	8.22%	196	8,361	8,558	26,272	9.34%
Large Hydro	27,066	12.55%	4,712	1,109	5,821	32,886	11.70%
Biomass	5,037	2.34%	753	-	753	5,790	2.06%
Geothermal	10,999	5.10%	221	2,347	2,569	13,567	4.83%
Small Hydro	4,853	2.25%	133	2	135	4,988	1.77%
Solar	41,344	19.17%	417	6,108	6,525	47,869	17.03%
Wind	13,920	6.46%	9,177	8,302	17,479	31,399	11.17%
Total Non-GHG and Renewable Resources	120,933	56.09%	15,609	26,229	41,838	162,771	57.90%
SYSTEM TOTALS	***215,623***	***100.00%***	***15,925***	***49,593***	***65,518***	***281,140***	***100.00%***

Source: California Energy Commission's 2023 Total System Electric Generation

2.2 ELECTRICITY

The Southern California region's electricity reliability has been of concern for the past several years due to the planned retirement of aging facilities that depend upon once-through cooling technologies, as well as the June 2013 retirement of the San Onofre Nuclear Generating Station (San Onofre). While the once-through cooling phase-out has been ongoing since the May 2010 adoption of the State Water Resources Control Board's once-through cooling policy, the retirement of San Onofre complicated the situation. California ISO studies revealed the extent to which the South California Air Basin (SCAB) and the San Diego Air Basin (SDAB) region were vulnerable to low-voltage and post-transient voltage instability concerns. A preliminary plan to address these issues was detailed in the 2013 Integrative Energy Policy Report (IEPR) after a collaborative process with other energy agencies, utilities, and air districts. Similarly, the subsequent 2023 IEPR provides information and policy recommendations on advancing a clean, reliable, and affordable energy system (12).

California's electricity industry is an organization of traditional utilities, private generating companies, and state agencies, each with a variety of roles and responsibilities to ensure that electrical power is provided to consumers. The California Independent Service Operator (ISO) is a nonprofit public benefit corporation and is the impartial operator of the State's wholesale power grid and is charged with maintaining grid reliability, and to direct uninterrupted electrical energy supplies to California's homes and communities. While utilities still own transmission assets, the ISO routes electrical power along these assets, maximizing the use of the transmission system and its power generation resources. The ISO matches buyers and sellers of electricity to ensure that enough power is available to meet demand. To these ends, every five minutes the ISO forecasts electrical demands, accounts for operating reserves, and assigns the lowest cost power plant unit to meet demands while ensuring adequate system transmission capacities and capabilities (13).

Part of the ISO's charge is to plan and coordinate grid enhancements to ensure that electrical power is provided to California consumers. To this end, utilities file annual transmission expansion/modification plans to accommodate the State's growing electrical needs. The ISO reviews and either approves or denies the proposed additions. In addition, and perhaps most importantly, the ISO works with other areas in the western United States electrical grid to ensure that adequate power supplies are available to the State. In this manner, continuing reliable and affordable electrical power is assured to existing and new consumers throughout the State.

Electricity is currently provided to the Project site by Southern California Edison (SCE). SCE provides electric power to more than 15 million persons in 15 counties and in 180 incorporated cities, within a service area encompassing approximately 50,000 square miles. Based on SCE's 2023 Power Content Label Mix, SCE derives electricity from varied energy resources including: fossil fuels, hydroelectric generators, nuclear power plants, geothermal power plants, solar power generation, and wind farms. SCE also purchases from independent power producers and utilities, including out-of-state suppliers (14).

Table 2-2, SCE's specific proportional shares of electricity sources in 2023. As indicated in Table 2-2, the 2023 SCE Power Mix has renewable energy at 36.9% of the overall energy resources.

Geothermal resources are at 4.8%, wind power is at 11.2%, large hydroelectric sources are at 11.7%, solar energy is at 17.0%, and coal is at 1.8% (15).

TABLE 2-2: SCE 2023 POWER CONTENT MIX

Energy Resources	2023 SCE Power Mix
Eligible Renewable	**36.9%**
Biomass & Waste	2.1%
Geothermal	4.8%
Eligible Hydroelectric	1.8%
Solar	17.0%
Wind	11.2%
Coal	**1.8%**
Large Hydroelectric	**11.7%**
Natural Gas	**36.6%**
Nuclear	**9.3%**
Other	**0.1%**
Unspecified Sources of power*	3.7%
Total	**100%**

* "Unspecified sources of power" means electricity from transactions that are not traceable to specific generation sources

However, it should be noted that upon annexation, all electricity to the site would be provided by Lancaster Choice Energy. Lancaster Choice Energy serves the City of Lancaster and gives customers the option to purchase energy from cleaner renewable sources. Table 2-3 below presents the power content mix for Lancaster Choice Energy.

TABLE 2-2: LANCASTER CHOICE ENERGY 2023 POWER CONTENT MIX

Energy Resources	2023 Clear Choice Energy Power Mix	2023 Smart Choice Energy Power Mix
Eligible Renewable	**41.1%**	**41.2%**
Biomass & Waste	0.6%	0.0%
Geothermal	1.8%	0.0%
Eligible Hydroelectric	0.4%	0.0%
Solar	15.7%	20.6%
Wind	12.6%	20.6%
Coal	**0.0%**	**0.0%**
Large Hydroelectric	**0.7%**	**0.0%**
Natural Gas	**0.0%**	**0.0%**
Nuclear	**6.9%**	**0.0%**
Other	**0.0%**	**0.0%**

Energy Resources	2023 Clear Choice Energy Power Mix	2023 Smart Choice Energy Power Mix
Unspecified Sources of power*	51.3%	58.8%
Total	**100%**	**100%**

* "Unspecified sources of power" means electricity from transactions that are not traceable to specific generation sources

2.3 NATURAL GAS

The following summary of natural gas customers and volumes, supplies, delivery of supplies, storage, service options, and operations is excerpted from information provided by the California Public Utilities Commission (CPUC).

"The CPUC regulates natural gas utility service for approximately 10.8 million customers that receive natural gas from Pacific Gas and Electric (PG&E), Southern California Gas (SoCalGas), San Diego Gas & Electric (SDG&E), Southwest Gas, and several smaller natural gas utilities. The CPUC also regulates independent storage operators: Lodi Gas Storage, Wild Goose Storage, Central Valley Storage and Gill Ranch Storage.

California's natural gas utilities provide service to over 11 million gas meters. SoCalGas and PG&E provide service to about 5.9 million and 4.3 million customers, respectively, while SDG&E provides service to over 800, 000 customers. In 2018, California gas utilities forecasted that they would deliver about 4740 million cubic feet per day (MMcfd) of gas to their customers, on average, under normal weather conditions.

The overwhelming majority of natural gas utility customers in California are residential and small commercials customers, referred to as "core" customers. Larger volume gas customers, like electric generators and industrial customers, are called "noncore" customers. Although very small in number relative to core customers, noncore customers consume about 65% of the natural gas delivered by the state's natural gas utilities, while core customers consume about 35%.

A significant amount of gas (about 19%, or 1131 MMcfd, of the total forecasted California consumption in 2018) is also directly delivered to some California large volume consumers, without being transported over the regulated utility pipeline system. Those customers, referred to as "bypass" customers, take service directly from interstate pipelines or directly from California producers.

SDG&E and Southwest Gas' southern division are wholesale customers of SoCalGas, i.e., they receive deliveries of gas from SoCalGas and in turn deliver that gas to their own customers. (Southwest Gas also provides natural gas distribution service in the Lake Tahoe area.) Similarly, West Coast Gas, a small gas utility, is a wholesale customer of PG&E. Some other wholesale customers are municipalities like the cities of Palo Alto, Long Beach, and Vernon, which are not regulated by the CPUC.

Natural gas from out-of-state production basins is delivered into California via the interstate natural gas pipeline system. The major interstate pipelines are Gas Transmission Northwest Pipeline, Kern River Pipeline, Transwestern Pipeline, El Paso

Pipeline, Ruby Pipeline, Mojave Pipeline, and Tuscarora. Another pipeline, the North Baja - Baja Norte Pipeline takes gas off the El Paso Pipeline at the California/Arizona border and delivers that gas through California into Mexico. While the Federal Energy Regulatory Commission (FERC) regulates the transportation of natural gas on the interstate pipelines, and authorizes rates for that service, the CPUC may participate in FERC regulatory proceedings to represent the interests of California natural gas consumers.

The gas transported to California gas utilities via the interstate pipelines, as well as some of the California-produced gas, is delivered into the PG&E and SoCalGas intrastate natural gas transmission pipelines systems (commonly referred to as California's "backbone" pipeline system). Natural gas on the utilities' backbone pipeline systems is then delivered to the local transmission and distribution pipeline systems, or to natural gas storage fields. Some large volume noncore customers take natural gas delivery directly off the high-pressure backbone and local transmission pipeline systems, while core customers and other noncore customers take delivery off the utilities' distribution pipeline systems. The state's natural gas utilities operate over 100,000 miles of transmission and distribution pipelines, and thousands more miles of service lines.

Bypass customers take most of their deliveries directly off the Kern/Mojave pipeline system, but they also take a significant amount of gas from California production.

PG&E and SoCalGas own and operate several natural gas storage fields that are located within their service territories in northern and southern California, respectively. These storage fields, and four independently owned storage utilities - Lodi Gas Storage, Wild Goose Storage, Central Valley Storage, and Gill Ranch Storage - help meet peak seasonal and daily natural gas demand and allow California natural gas customers to secure natural gas supplies more efficiently. PG&E is a 25% owner of the Gill Ranch Storage field. These storage fields provide a significant amount of infrastructure capacity to help meet California's natural gas requirements, and without these storage fields, California would need much more pipeline capacity in order to meet peak gas requirements .

Prior to the late 1980s, California regulated utilities provided virtually all natural gas services to all their customers. Since then, the Commission has gradually restructured the California gas industry in order to give customers more options while assuring regulatory protections for those customers that wish to, or are required to, continue receiving utility-provided services.

The option to purchase natural gas from independent suppliers is one of the results of this restructuring process. Although the regulated utilities procure natural gas supplies for most core customers, core customers have the option to purchase natural gas from independent natural gas marketers, called "core transport agents" (CTA). Contact information for core transport agents can be found on the utilities' web sites. Noncore customers, on the other hand, make natural gas supply arrangements directly with producers or with marketers.

Another option resulting from the restructuring process occurred in 1993, when the Commission removed the utilities' storage service responsibility for noncore customers, along with the cost of this service from noncore customers' transportation rates. The Commission also encouraged the development of independent storage fields, and in subsequent years, all the independent storage fields in California were established. Noncore customers and marketers may now take storage service from the utility or from an independent storage provider (if available), and pay for that service, or may opt to take no storage service at all. For core customers, the Commission assures that the utility has adequate storage capacity set aside to meet core requirements, and core customers pay for that service.

In a 1997 decision, the Commission adopted PG&E's "Gas Accord", which unbundled PG&E's backbone transmission costs from noncore transportation rates. This decision gave customers and marketers the opportunity to obtain pipeline capacity rights on PG&E's backbone transmission pipeline system, if desired, and pay for that service at rates authorized by the Commission. The Gas Accord also required PG&E to set aside a certain amount of backbone transmission capacity in order to deliver gas to its core customers. Subsequent Commission decisions modified and extended the initial terms of the Gas Accord. The "Gas Accord" framework is still in place today for PG&E's backbone and storage rates and services and is now simply referred to as PG&E Gas Transmission and Storage (GT&S).

In a 2006 decision, the Commission adopted a similar gas transmission framework for Southern California, called the "firm access rights" system. SoCalGas and SDG&E implemented the firm access rights (FAR) system in 2008, and it is now referred to as the backbone transmission system (BTS) framework. As under the PG&E backbone transmission system, SoCalGas backbone transmission costs are unbundled from noncore transportation rates. Noncore customers and marketers may obtain, and pay for, firm backbone transmission capacity at various receipt points on the SoCalGas system. A certain amount of backbone transmission capacity is obtained for core customers to assure meeting their requirements.

Many if not most noncore customers now use a marketer to provide for several of the services formerly provided by the utility. That is, a noncore customer may simply arrange for a marketer to procure its supplies, and obtain any needed storage and backbone transmission capacity, in order to assure that it will receive its needed deliveries of natural gas supplies. Core customers still mainly rely on the utilities for procurement service, but they have the option to take procurement service from a CTA. Backbone transmission and storage capacity is either set aside or obtained for core customers in amounts to assure very high levels of service.

In order properly operate their natural gas transmission pipeline and storage systems, PG&E and SoCalGas must balance the amount of gas received into the pipeline system and delivered to customers or to storage fields. Some of these utilities' storage capacity is dedicated to this service, and under most circumstances, customers do not need to precisely match their deliveries with their consumption. However, when too much or too

> *little gas is expected to be delivered into the utilities' systems, relative to the amount being consumed, the utilities require customers to more precisely match up their deliveries with their consumption. And, if customers do not meet certain delivery requirements, they could face financial penalties. The utilities do not profit from these financial penalties - the amounts are then returned to customers as a whole. If the utilities find that they are unable to deliver all the gas that is expected to be consumed, they may even call for a curtailment of some gas deliveries. These curtailments are typically required for just the largest, noncore customers. It has been many years since there has been a significant curtailment of core customers in California."* (16)

As indicated in the preceding discussions, natural gas is available from a variety of in-state and out-of-state sources and is provided throughout the State in response to market supply and demand. Complementing available natural gas resources, biogas may soon be available via existing delivery systems, thereby increasing the availability and reliability of resources in total. The CPUC oversees utility purchases and transmission of natural gas to ensure reliable and affordable natural gas deliveries to existing and new consumers throughout the State.

PAs 2, 4, 6 (eastern half), 7, and 8 would not utilize natural gas. However, because specific information for PAs 1, 3, and 5, and the remaining Annexation Area is not available, it was conservatively assumed that land uses in these areas (as well as the western half of PA 6) would utilize natural gas, and usage was estimated based on CalEEMod defaults.

2.4 TRANSPORTATION ENERGY RESOURCES

The Project would generate additional vehicle trips with resulting consumption of energy resources, predominantly gasoline and diesel fuel. The Department of Motor Vehicles (DMV) identified 36.2 million registered vehicles in California (7), and those vehicles consume an estimated 17.2 billion gallons of fuel each year.[2] Gasoline (and other vehicle fuels) are commercially provided commodities and would be available to the Project patrons and employees via commercial outlets.

California's on-road transportation system includes 396,616 lane miles, more than 26.6 million passenger vehicles and light trucks, and almost 9.0 million medium- and heavy-duty vehicles (7). While gasoline consumption has been declining since 2008 it is still by far the dominant fuel. California is the second-largest consumer of petroleum products, after Texas, and accounts for 8% of the nation's total consumption. The State is the largest U.S. consumer of motor gasoline and jet fuel, and 83% of the petroleum consumed in California is used in the transportation sector (17).

California accounts for less than 1% of total U.S. natural gas reserves and production. As with crude oil, California's natural gas production has experienced a gradual decline since 1985. In 2023, about 32% of the natural gas delivered to consumers went to the State's industrial sector, and about 31% was delivered to the electric power sector. Natural gas fueled more than two-fifths of the State's utility-scale electricity generation in 2023. The residential sector, where

[2] Fuel consumptions estimated utilizing information from EMFAC2021.

three-fifths of California households use natural gas for home heating, accounted for 23% of natural gas deliveries. The commercial sector received 13% of the deliveries to end users and the transportation sector consumed the remaining 1% (17).

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3 REGULATORY BACKGROUND

Federal and state agencies regulate energy use and consumption through various means and programs. On the federal level, the U.S. Department of Transportation, the U.S. Department of Energy, and the U.S. Environmental Protection Agency (EPA) are three federal agencies with substantial influence over energy policies and programs. On the state level, the CPUC and the CEC are two agencies with authority over different aspects of energy. Relevant federal and state energy-related laws and plans are summarized below.

3.1 FEDERAL REGULATIONS

3.1.1 INTERMODAL SURFACE TRANSPORTATION EFFICIENCY ACT OF 1991 (ISTEA)

The ISTEA promoted the development of inter-modal transportation systems to maximize mobility as well as address national and local interests in air quality and energy. ISTEA contained factors that Metropolitan Planning Organizations (MPOs) were to address in developing transportation plans and programs, including some energy-related factors. To meet the new ISTEA requirements, MPOs adopted explicit policies defining the social, economic, energy, and environmental values guiding transportation decisions.

3.1.2 THE TRANSPORTATION EQUITY ACT FOR THE 21ST CENTURY (TEA-21)

The TEA-21 was signed into law in 1998 and builds upon the initiatives established in the ISTEA legislation, discussed above. TEA-21 authorizes highway, highway safety, transit, and other efficient surface transportation programs. TEA-21 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 good transportation decisions. TEA-21 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.

3.2 CALIFORNIA REGULATIONS

3.2.1 INTEGRATED ENERGY POLICY REPORT (IEPR)

Senate Bill 1389 (Bowen, Chapter 568, Statutes of 2002) requires the CEC to prepare a biennial integrated energy policy report that assesses major energy trends and issues facing the state's electricity, natural gas, and transportation fuel sectors and provides policy recommendations to conserve resources; protect the environment; ensure reliable, secure, and diverse energy supplies; enhance the state's economy; and protect public health and safety (Public Resources Code § 25301[a]). The CEC prepares these assessments and associated policy recommendations every two years, with updates in alternate years, as part of the Integrated Energy Policy Report.

The 2023 IEPR was adopted February 2024, and continues to work towards improving electricity, natural gas, and transportation fuel energy use in California. The 2023 IEPR introduces a new framework for embedding equity and environmental justice at the CEC and the California Energy Planning Library which allows for easier access to energy data and analytics for a wide range of users. Additionally, energy reliability, western electricity integration, gasoline cost factors and price spikes, the role of hydrogen in California's clean energy future, fossil gas transition and distributed energy resources are topics discussed within the 2023 IEPR (18).

3.2.2 STATE OF CALIFORNIA ENERGY PLAN

The CEC is responsible for preparing the State Energy Plan, which identifies emerging trends related to energy supply, demand, conservation, public health and safety, and the maintenance of a healthy economy. The State Energy Plan calls for the State to assist in the transformation of the transportation system to improve air quality, reduce congestion, and increase the efficient use of fuel supplies with the least environmental and energy costs. To further this policy, the plan identifies several strategies, including assistance to public agencies and fleet operators and encouragement of urban designs that reduce vehicle miles traveled (VMT) and accommodate pedestrian and bicycle access.

3.2.3 TITLE 24 ENERGY EFFICIENCY STANDARDS AND CALIFORNIA GREEN BUILDING STANDARDS

California Code of Regulations (CCR) Title 24 Part 6: The California Energy Code was first adopted in 1978 in response to a legislative mandate to reduce California's energy consumption.

The standards are updated periodically to allow consideration and possible incorporation of new energy efficient technologies and methods. CCR, Title 24, Part 11: California Green Building Standards Code (CALGreen) is a comprehensive and uniform regulatory code for all residential, commercial, and school buildings that went in effect on August 1, 2009, and is administered by the California Building Standards Commission.

CALGreen is updated on a regular basis, with the most recent approved update consisting of the 2022 California Green Building Code Standards that became effective on January 1, 2023[3]. The CEC anticipates that the 2022 energy code will provide $1.5 billion in consumer benefits and reduce GHG emissions by 10 million metric tons (19). The Project would be required to comply with the applicable standards in place at the time building permit document submittals are made. These require, among other items (20):

NONRESIDENTIAL MANDATORY MEASURES

- Short-term bicycle parking. If the new project or an additional alteration is anticipated to generate visitor traffic, provide permanently anchored bicycle racks within 200 feet of the visitors' entrance, readily visible to passers-by, for 5% of new visitor motorized vehicle parking spaces being added, with a minimum of one two-bike capacity rack (5.106.4.1.1).

[3] The 2022 California Green Building Standard Code became effective on January 1, 2023, however; it has since been amended on July 1, 2024 with the Intervening Code Cycle Update which is reflected in this report. Additionally, it should be noted that CALGreen is currently being updated, with the most recent draft update consisting of the 2025 California Green Building Code Standards that will be effective on January 1, 2026. As construction of the Project is anticipated to be completed in 2028, it is presumed that the Project would be required to comply with the Title 24 standards in place at that time.

- Long-term bicycle parking. For new buildings with tenant spaces that have 10 or more tenant-occupants, provide secure bicycle parking for 5% of the tenant-occupant vehicular parking spaces with a minimum of one bicycle parking facility (5.106.4.1.2).
- Designated parking for clean air vehicles. For new projects or additions to alterations to existing Projects that add 10 or more vehicular parking spaces, provide designated parking for any combination of low-emitting, fuel-efficient and carpool/van pool vehicles as shown in Table 5.106.5.2 (5.106.5.2).
- EV charging stations. New construction shall facilitate the future installation of EV supply equipment. The compliance requires empty raceways for future conduit and documentation that the electrical system has adequate capacity for the future load. The number of spaces to be provided for is contained in Table 5.106. 5.3.3 (5.106.5.3). Additionally, Table 5.106.5.4.1 specifies requirements for the installation of raceway conduit and panel power requirements for medium- and heavy-duty EV supply equipment for warehouses, grocery stores, and retail stores.
- Outdoor light pollution reduction. Outdoor lighting systems shall be designed to meet the backlight, uplight and glare ratings per Table 5.106.8 (5.106.8).
- Construction waste management. Recycle and/or salvage for reuse a minimum of 65% of the nonhazardous construction and demolition waste in accordance with Section 5.408.1.1. 5.405.1.2, or 5.408.1.3; or meet a local construction and demolition waste management ordinance, whichever is more stringent (5.408.1).
- Excavated soil and land clearing debris. 100% of trees, stumps, rocks and associated vegetation and soils resulting primarily from land clearing shall be reuse or recycled. For a phased project, such material may be stockpiled on site until the storage site is developed (5.408.3).
- Recycling by Occupants. Provide readily accessible areas that serve the entire building and are identified for the depositing, storage, and collection of non-hazardous materials for recycling, including (at a minimum) paper, corrugated cardboard, glass, plastics, organic waste, and metals or meet a lawfully enacted local recycling ordinance, if more restrictive (5.410.1).
- Water conserving plumbing fixtures and fittings. Plumbing fixtures (water closets and urinals) and fittings (faucets and showerheads) shall comply with the following:
    - Water Closets. The effective flush volume of all water closets shall not exceed 1.28 gallons per flush (5.303.3.1)
    - Urinals. The effective flush volume of wall-mounted urinals shall not exceed 0.125 gallons per flush (5.303.3.2.1). The effective flush volume of floor- mounted or other urinals shall not exceed 0.5 gallons per flush (5.303.3.2.2).
    - Showerheads. Single showerheads shall have a minimum flow rate of not more than 1.8 gallons per minute and 80 psi (5.303.3.3.1). When a shower is served by more than one showerhead, the combine flow rate of all showerheads and/or other shower outlets controlled by a single valve shall not exceed 1.8 gallons per minute at 80 psi (5.303.3.3.2).

- Faucets and fountains. Nonresidential lavatory faucets shall have a maximum flow rate of not more than 0.5 gallons per minute at 60 psi (5.303.3.4.1). Kitchen faucets shall have a maximum flow rate of not more than 1.8 gallons per minute of 60 psi (5.303.3.4.2). Wash fountains shall have a maximum flow rate of not more than 1.8 gallons per minute (5.303.3.4.3). Metering faucets shall not deliver more than 0.20 gallons per cycle (5.303.3.4.4). Metering faucets for wash fountains shall have a maximum flow rate not more than 0.20 gallons per cycle (5.303.3.4.5).

- Outdoor potable water uses in landscaped areas. Nonresidential developments shall comply with a local water efficient landscape ordinance or the current California Department of Water Resources' Model Water Efficient Landscape Ordinance (MWELO), whichever is more stringent (5.304.1).
- Water meters. Separate submeters or metering devices shall be installed for new buildings or additions in excess of 50,000 square feet (sf) or for excess consumption where any tenant within a new building or within an addition that is project to consume more than 1,000 gallons per day (GPD) (5.303.1.1 and 5.303.1.2).
- Outdoor water uses in rehabilitated landscape projects equal or greater than 2,500 sf. Rehabilitated landscape projects with an aggregate landscape area equal to or greater than 2,500 sf requiring a building or landscape permit (5.304.3).
- Commissioning. For new buildings 10,000 sf and over, building commissioning shall be included in the design and construction processes of the building project to verify that the building systems and components meet the owner's or owner representative's project requirements (5.410.2).

RESIDENTIAL MANDATORY MEASURES

- Electric vehicle (EV) charging stations. New construction shall comply with Section 4.106.4.1, 4.106.4.2, 4.106.4.3, to facilitate future installation and use of EV chargers. Electric vehicle supply equipment (EVSE) shall be installed in accordance with the *California Electrical Code*, Article 625. (4.106.4).
  - New one- and two-family dwellings and town-houses with attached private garages. For each dwelling unit, install a listed raceway to accommodate a dedicated 208/240-volt branch circuit. The raceway shall not be less than trade size 1 (nominal 1-inch inside diameter). The raceway shall originate at the main service or subpanel and shall terminate into a listed cabinet, box or other enclosure in close proximity to the proposed location of an EV charger. Raceways are required to be continuous at enclosed, inaccessible or concealed areas and spaces. The service panel and/or subpanel shall provide capacity to install a 40-ampere 208/240-volt minimum dedicated branch circuit and space(s) reserved to permit installation of a branch circuit overcurrent protective device.
  - New hotels and motels. All newly constructed hotels and motels shall provide EV spaces capable of supporting future installation of EVSE. The construction documents shall identify the location of the EV spaces. The number of required EV spaces shall be based on the total number of parking spaces provided for all types of parking facilities in accordance with Table 4.106.4.3.1.
- Water conserving plumbing fixtures and fittings. Plumbing fixtures (water closets and urinals) and fittings (faucets and showerheads) shall comply with Sections 4.303.1.1, 4.303.1.2, 4.303.1.3, and 4.303.1.4.

- Outdoor potable water use in landscape areas. Residential developments shall comply with a local water efficient landscape ordinance or the current California Department of Water Resource ' Model Water Efficient Landscape Ordinance (MWELO), whichever is more stringent.
- Operation and maintenance manual. At the time of final inspection, a manual, compact disc, web-based reference or other media acceptable to the enforcing agency which includes all of the following shall be placed in the building (R109.1.6.2):
    - Directions to the owner or occupant that the manual shall remain with the building throughout the life cycle of the structure.
    - Operations and maintenance instructions for the following:
        - Equipment and appliances, including water-saving devices and systems, HVAC systems, photovoltaic systems, EV chargers, water-heating systems and other major appliances and equipment.
        - Roof and yard drainage, including gutter and downspouts.
        - Space conditioning systems, including condensers and air filters.
        - Landscape irrigation systems.
        - Water reuse systems.
    - Information from local utility, water and waste recovery providers on methods to future reduce resource consumption, including recycle programs and locations.
    - Public transportation and/or carpool options available in the area.
    - Educational material on the positive impacts of an interior relative humidity between 30-60% and what methods an occupants may use to maintain the relative humidity level in that range.
    - Information about water-conserving landscape and irrigation design and controllers which conserve water.
    - Instructions for maintaining gutters and downspouts and the importance of diverting water at least 5 feet away from the foundation.
    - Information about state solar energy and incentive programs available.
    - A copy of all special inspection verifications required by the enforcing agency of this code.
    - Information from CALFIRE on maintenance of defensible space around residential structures.
- Any installed gas fireplace shall be direct-vent sealed-combustion type. Any installed woodstove or pellet stove shall comply with U.S. EPA New Source Performance Standards (NSPS) emission limits as applicable, and shall have a permanent label indicating they are certified to meet the emission limits. Woodstoves, pellet stoves and fireplaces shall also comply with applicable local ordinances.
- Paints and coatings. Architectural paints and coatings shall comply with VOC limits in Table 1 of the CARB Architectural Suggested Control Measure, as shown in Table 4.504.3, unless more stringent local limits apply. The VOC content limit for coatings that do not meet the definitions for the specialty coatings categories listed in Table 4.504.3 shall be determined by classifying the coating as a Flat, Nonflat, or Nonflat-high Gloss coating, based on its glass, as defined in subsections 4.21, 4.36, and 4.37 of the 2007 CARB, Suggested Control Measure, and the corresponding Flat, Nonflat, Nonflat-high Gloss VOC limit in Table 4.504.3 shall apply.

3.2.4 AB 1493 PAVLEY REGULATIONS AND FUEL EFFICIENCY STANDARDS

California AB 1493, enacted on July 22, 2002, required CARB to develop and adopt regulations that reduce GHGs emitted by passenger vehicles and light duty trucks. Under this legislation, CARB adopted regulations to reduce GHG emissions from non-commercial passenger vehicles (cars and light-duty trucks). Although aimed at reducing GHG emissions, specifically, a co-benefit of the Pavley standards is an improvement in fuel efficiency and consequently a reduction in fuel consumption.

3.2.5 EXECUTIVE ORDER B-55-18 AND SB 100

SB 100 and Executive Order B-55-18 were signed by Governor Brown on September 10, 2018. Under the existing renewables portfolio standard (RPS), 25% of retail sales of electricity are required to be from renewable sources by December 31, 2016, 33% by December 31, 2020, 40% by December 31, 2024, 45% by December 31, 2027, and 50% by December 31, 2030. SB 100 raises California's RPS requirement to 50% renewable resources target by December 31, 2026, a 60% target by December 31, 2030, and a 100% target by December 31, 2045. SB 100 also requires that retail sellers and local publicly owned electric utilities procure a minimum quantity of electricity products from eligible renewable energy resources so that the total kilowatt hours (kWh) of those products sold to their retail end-use customers achieve 44% of retail sales by December 31, 2024, 52% by December 31, 2027, and 60% by December 31, 2030. In addition to targets under AB 32 and SB 32, Executive Order B-55-18 establishes a carbon neutrality goal for the state of California by 2045; and sets a goal to maintain net negative emissions thereafter. The Executive Order directs the California Natural Resources Agency (CNRA), California EPA (CalEPA), the California Department of Food and Agriculture (CDFA), and CARB to include sequestration targets in the Natural and Working Lands Climate Change Implementation Plan consistent with the carbon neutrality goal.

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4 PROJECT ENERGY DEMANDS AND ENERGY EFFICIENCY MEASURES

4.1 EVALUATION CRITERIA

Per Appendix F of the *State CEQA Guidelines* (21), states that the means of achieving the goal of energy conservation includes the following:

- Decreasing overall per capita energy consumption;
- Decreasing reliance on fossil fuels such as coal, natural gas and oil; and
- Increasing reliance on renewable energy sources.

In compliance with Appendix G of the *State CEQA Guidelines* (22), this report analyzes the project's anticipated energy use during construction and operations to determine if the Project would:

- Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation; or
- Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

4.2 METHODOLOGY

Information from the CalEEMod version 2022.1 outputs for the AQIA (2) was utilized in this analysis, detailing Project related construction equipment, transportation energy demands, and facility energy demands.

4.2.1 CALEEMOD

The California Air Pollution Control Officers Association (CAPCOA) in conjunction with other California air districts, including the Antelope Valley Air Quality Management District (AVAQMD), released CalEEMod 2022 in May 2022. CalEEMod periodically releases updates, as such the latest version available at the time of this report has been utilized in this analysis. The purpose of this model is to calculate construction-source and operational-source criteria pollutant (VOCs, NO_X, SO_X, CO, PM_{10}, and $PM_{2.5}$) and GHG emissions from direct and indirect sources; and quantify applicable air quality and GHG reductions achieved from mitigation measures (23). Accordingly, the latest version of CalEEMod has been used for this Project to determine construction and operational air quality emissions. Output from the model runs for both construction and operational activity are provided in Appendices 4.1 through 4.5.

4.2.2 EMISSION FACTORS MODEL

On May 2, 2022, the EPA approved the 2021 version of the EMissions FACtor model (EMFAC2021) web database for use in State Implementation Plan and transportation conformity analyses. EMFAC2021 is a mathematical model that was developed to calculate emission rates, fuel consumption, VMT from motor vehicles that operate on highways, freeways, and local roads in California and is commonly used by the California Air Resources Board (CARB) to project changes in future emissions from on-road mobile sources (24). This energy study utilizes the different fuel types for each vehicle class from the annual EMFAC2021 emission inventory in order to derive the average vehicle fuel economy which is then used to determine the estimated annual fuel consumption associated with vehicle usage during Project construction and operational activities. For purposes of analysis, the 2026 through 2031 analysis years were utilized to determine the average vehicle fuel economy used throughout the construction duration of the Project.

4.3 CONSTRUCTION ENERGY DEMANDS

The focus within this section is the energy implications of the construction process, specifically the power cost from on-site electricity consumption during construction of the proposed Project.

4.3.1 CONSTRUCTION POWER COST

The total Project construction power costs is the summation of the products of the area (sf) by the construction duration and the typical power cost.

CONSTRUCTION DURATION

The analysis in this AQIA considers construction to commence in 2026 and last through 2031. Construction duration by phase is shown on Table 4-1. The construction schedule utilized in the analysis represents a "worst-case" analysis scenario should construction occur any time after the respective dates since emission factors for construction decrease as time passes and the analysis year increases due to emission regulations becoming more stringent.[4] The duration of construction activity and associated equipment represents a reasonable approximation of the expected construction fleet as required per *CEQA Guidelines*.

TABLE 4-1: CONSTRUCTION DURATION

Construction Activity	Working Days
Demolition	60
Site Preparation	48
Grading	144
Building Construction	1,240
Paving	405
Architectural Coating	405

PROJECT CONSTRUCTION POWER COST

The *2024 National Construction Estimator* identifies a typical power cost per 1,000 sf of building construction per month of $2.66, which was used to calculate the Project's total construction

[4] As shown in the CalEEMod User's Guide Version 2022.1, Section 4.3 "Off-Road Equipment" as the analysis year increases, emission factors for the same equipment pieces decrease due to the natural turnover of older equipment being replaced by newer less polluting equipment and new regulatory requirements.

power cost (25). As shown on Table 4-2, the total power cost of the on-site electricity usage during the building construction of the Project is estimated to be approximately $2,057,281.55.

TABLE 4-2: CONSTRUCTION POWER COST

Land Use	Power Cost (per 1,000 SF of construction per month)	Size (1,000 SF)	Construction Duration (months)	Project Construction Power Cost
Warehousing, High-Cube Parcel Hub, High-Cube Transload & Short-Term	$2.66	10,366.542	68	$1,875,100.12
High-Cube Cold Storage	$2.66	1,007.195	68	$182,181.43
TOTAL CONSTRUCTION POWER COST				***$2,057,281.55***

4.3.2 CONSTRUCTION ELECTRICITY USAGE

The total Project construction electricity usage is the summation of the products of the power cost (estimated in Table 4-2) by the utility provider cost per kilowatt hour (kWh) of electricity.

PROJECT CONSTRUCTION ELECTRICITY USAGE

The SCE's general service rate schedule was used to determine the Project's electrical usage. As of October 1, 2024, SCE's general service rate is $0.16 per kilowatt hours (kWh) of electricity for industrial and commercial services (26). As shown on Table 4-3, the total electricity usage from on-site Project construction related activities is estimated to be approximately 12,858,010 kWh.

TABLE 4-3: CONSTRUCTION ELECTRICITY USAGE

Land Use	Cost per kWh	Project Construction Electricity Usage (kWh)
Warehousing, High-Cube Parcel Hub, High-Cube Transload & Short-Term Storage	$0.16	11,719,376
High-Cube Cold Storage	$0.16	1,138,634
TOTAL CONSTRUCTION ELECTRICITY USAGE		***12,858,010***

4.3.3 CONSTRUCTION EQUIPMENT FUEL ESTIMATES

Fuel consumed by construction equipment would be the primary energy resource expended over the course of Project construction.

CONSTRUCTION EQUIPMENT

Site specific construction fleet may vary due to specific project needs at the time of construction. The associated construction equipment was generally based on CalEEMod defaults. A detailed summary of construction equipment assumptions by phase is provided in Table 4-4. Please refer to specific detailed modeling inputs/outputs contained in Appendix 4.1 of this analysis.

TABLE 4-4: CONSTRUCTION EQUIPMENT ASSUMPTIONS

Phase Name	Equipment[1]	Number	Hours Per Day
Demolition	Rubber Tired Dozers	4	8
	Excavators	3	8
	Concrete/Industrial Saws	2	8
	Crushing/Processing Equipment	1	8
Site Preparation	Rubber Tired Dozers	12	8
	Crawler Tractors	9	8
Grading	Crawler Tractors	6	8
	Excavators	6	8
	Graders	3	8
	Rubber Tired Dozers	3	8
	Scrapers	16	8
Building Construction	Cranes	4	8
	Forklifts	6	8
	Generator Sets	2	8
	Tractors/Loaders/Backhoes	6	8
	Welders	2	8
Paving	Pavers	4	8
	Paving Equipment	4	8
	Rollers	4	8
Architectural Coating	Air Compressors	2	8

[1] In order to account for fugitive dust emissions, Crawler Tractors were used in lieu of Tractors/Loaders/Backhoes during site preparation and grading activities.

PROJECT CONSTRUCTION EQUIPMENT FUEL CONSUMPTION

Project construction activity timeline estimates, construction equipment schedules, equipment power ratings, load factors, and associated fuel consumption estimates are presented in Table 4-5. The aggregate fuel consumption rate for all equipment is estimated at 18.5 horsepower hour per gallon (hp-hr-gal.), obtained from CARB 2018 Emissions Factors Tables and cited fuel consumption rate factors presented in Table D-24 of the Moyer guidelines (27). For the purposes of this analysis, the calculations are based on all construction equipment being diesel-powered which is consistent with industry standards. Diesel fuel would be supplied by existing industrial and commercial fuel providers serving the Project area and region[5].

[5] Based on Appendix A of the CalEEMod User's Guide, Construction consists of several types of off-road equipment. Since the majority of the off-road construction equipment used for construction projects are diesel fueled, CalEEMod assumes all of the equipment operates on diesel fuel.

TABLE 4-5: CONSTRUCTION EQUIPMENT FUEL CONSUMPTION ESTIMATES

Phase Name	Duration (Days)	Equipment	HP Rating	Quantity	Usage Hours	Load Factor	HP-hrs/day	Total Fuel Consumption
Demolition	60	Rubber Tired Dozers	367	4	8	0.4	4,698	15,235
		Excavators	36	3	8	0.38	328	1,065
		Concrete/Industrial Saws	33	2	8	0.73	385	1,250
		Crushing/Proc. Equipment	12	1	8	0.85	82	265
Site Preparation	48	Rubber Tired Dozers	367	12	8	0.4	14,093	36,565
		Crawler Tractors	87	9	8	0.43	2,694	6,989
Grading	144	Crawler Tractors	87	6	8	0.43	1,796	13,977
		Excavators	36	6	8	0.38	657	5,111
		Graders	148	3	8	0.41	1,456	11,336
		Rubber Tired Dozers	367	3	8	0.4	3,523	27,424
		Scrapers	423	16	8	0.48	25,989	202,294
Building Construction	1,240	Cranes	367	4	8	0.29	3,406	228,278
		Forklifts	82	6	8	0.2	787	52,764
		Generator Sets	14	2	8	0.74	166	11,110
		Tractors/Loaders/Backhoes	84	6	8	0.37	1,492	99,994
		Welders	46	2	8	0.45	331	22,199
Paving	405	Pavers	81	4	8	0.42	1,089	23,832
		Paving Equipment	89	4	8	0.36	1,025	22,445
		Rollers	36	4	8	0.38	438	9,583
Architectural Coating	405	Air Compressors	37	2	8	0.48	284	6,221
TOTAL CONSTRUCTION FUEL DEMAND (GALLONS DIESEL FUEL)								***797,937***

As previously presented in Table 4-5, Project construction activities would consume an estimated 797,937 gallons of diesel fuel. Project construction would represent a "single-event" diesel fuel demand and would not require on-going or permanent commitment of diesel fuel resources for this purpose.

4.3.4 Construction Trips and VMT

Construction generates on-road vehicle emissions from vehicle usage for workers, hauling, and vendors commuting to and from the site. The number of workers, hauling, and vendor trips are presented below in Table 4-6. It should be noted that for Vendor Trips specifically, CalEEMod only assigns Vendor Trips to the Building Construction phase. Vendor trips would likely occur during all phases of construction. As such, the CalEEMod defaults for vendor trips have been adjusted based on a ratio of the total vendor trips to the number of days of each subphase of activity. Additionally, because paving and architectural coating activities overlap with building construction, the vendor trips assigned to building construction activities are assumed to be the same trips used to cover paving and architectural coating.

TABLE 4-6: CONSTRUCTION TRIPS AND VMT

Construction Activity	Worker Trips	Vendor Trips	Haul Trips
Demolition	25	75	2
Site Preparation	53	60	0
Grading	85	180	0
Building Construction	4,777	1,549	0
Paving	30	0	0
Architectural Coating	955	0	0

4.3.5 Construction Worker Fuel Estimates

With respect to estimated VMT for the Project, the construction worker trips (personal vehicles used by workers commuting to the Project from home) would generate an estimated 117,335,936 VMT during the 68 months of construction (2). Based on CalEEMod methodology, it is assumed that 50% of all construction worker trips are from light-duty-auto vehicles (LDA), 25% are from light-duty-trucks (LDT1[6]), and 25% are from light-duty-trucks (LDT2[7]). Data regarding Project related construction worker trips were based on CalEEMod defaults utilized within the Project's AQIA.

Vehicle fuel efficiencies for LDA, LDT1, and LDT2 were estimated using information generated within the 2021 version of the EMFAC developed by CARB. EMFAC2021 is a mathematical model that was developed to calculate emission rates, fuel consumption, and VMT from motor vehicles that operate on highways, freeways, and local roads in California and is commonly used by the

[6] Vehicles under the LDT1 category have a gross vehicle weight rating (GVWR) of less than 6,000 lbs. and equivalent test weight (ETW) of less than or equal to 3,750 lbs.

[7] Vehicles under the LDT2 category have a GVWR of less than 6,000 lbs. and ETW between 3,751 lbs. and 5,750 lbs.

CARB to project changes in future emissions from on-road mobile sources (24). EMFAC2021 was run for the LDA, LDT1, and LDT2 vehicle class within the California sub-area for the 2026 through 2031 calendar years. Data from EMFAC2021 is shown in Appendix 4.7.

Table 4-7 provides an estimated annual fuel consumption resulting from Project construction worker trips. Based on Table 4-7, it is estimated that 3,836,297 gallons of fuel will be consumed related to construction worker trips during full construction of the Project. It should be noted that construction worker trips would represent a "single-event" gasoline fuel demand and would not require on-going or permanent commitment of fuel resources for this purpose.

TABLE 4-7: CONSTRUCTION WORKER FUEL CONSUMPTION ESTIMATES

Year	Construction Activity	Duration (Days)	Worker Trips/Day	Trip Length (miles)	VMT	Average Vehicle Fuel Economy (mpg)	Estimated Fuel Consumption (gallons)
2026	LDA						
	Demolition	60	13	18.5	14,430	32.71	441
	Site Preparation	48	27	18.5	23,976	32.71	733
	Grading	144	43	18.5	114,552	32.71	3,502
	Building Construction	9	2389	18.5	397,769	32.71	12,161
	LDT1						
	Demolition	60	7	18.5	7,770	25.59	304
	Site Preparation	48	14	18.5	12,432	25.59	486
	Grading	144	22	18.5	58,608	25.59	2,290
	Building Construction	9	1195	18.5	198,968	25.59	7,775
	LDT2						
	Demolition	60	7	18.5	7,770	25.83	301
	Site Preparation	48	14	18.5	12,432	25.83	481
	Grading	144	22	18.5	58,608	25.83	2,269
	Building Construction	9	1195	18.5	198,968	25.83	7,703
2027	LDA						
	Building Construction	261	2389	18.5	11,535,287	33.38	345,584
	LDT1						
	Building Construction	261	1195	18.5	5,770,058	25.95	222,338
	LDT2						
	Building Construction	261	1195	18.5	5,770,058	26.41	218,512
2028	LDA						
	Building Construction	260	2389	18.5	11,491,090	34.18	336,204

Year	Construction Activity	Duration (Days)	Worker Trips/Day	Trip Length (miles)	VMT	Average Vehicle Fuel Economy (mpg)	Estimated Fuel Consumption (gallons)
	LDT1						
	Building Construction	260	1195	18.5	5,747,950	26.43	217,493
	LDT2						
	Building Construction	260	1195	18.5	5,747,950	27.05	212,493
2029	LDA						
	Building Construction	261	2389	18.5	11,535,287	34.97	329,857
	LDT1						
	Building Construction	261	1195	18.5	5,770,058	26.92	214,337
	LDT2						
	Building Construction	261	1195	18.5	5,770,058	27.66	208,616
2030	LDA						
	Building Construction	261	2389	18.5	11,535,287	35.75	322,666
	Paving	217	15	18.5	60,218	35.75	1,684
	Architectural Coating	217	478	18.5	1,918,931	35.75	53,676
	LDT1						
	Building Construction	261	1195	18.5	5,770,058	27.43	210,394
	Paving	217	8	18.5	32,116	27.43	1,171
	Architectural Coating	217	239	18.5	959,466	27.43	34,985
	LDT2						
	Building Construction	261	1195	18.5	5,770,058	28.24	204,347
	Paving	217	8	18.5	32,116	28.24	1,137
	Architectural Coating	217	239	18.5	959,466	28.24	33,980
2031	LDA						
	Building Construction	188	2389	18.5	8,308,942	36.51	227,586
	Paving	188	15	18.5	52,170	36.51	1,429
	Architectural Coating	188	478	18.5	1,662,484	36.51	45,536
	LDT1						
	Building Construction	188	1195	18.5	4,156,210	27.93	148,794
	Paving	188	8	18.5	27,824	27.93	996
	Architectural Coating	188	239	18.5	831,242	27.93	29,759
	LDT2						
	Building Construction	188	1195	18.5	4,156,210	28.78	144,424

Year	Construction Activity	Duration (Days)	Worker Trips/Day	Trip Length (miles)	VMT	Average Vehicle Fuel Economy (mpg)	Estimated Fuel Consumption (gallons)
	Paving	188	8	18.5	27,824	28.78	967
	Architectural Coating	188	239	18.5	831,242	28.78	28,885
TOTAL CONSTRUCTION WORKER FUEL CONSUMPTION							***3,836,297***

4.3.6 CONSTRUCTION VENDOR/HAULING FUEL ESTIMATES

With respect to estimated VMT, the construction vendor and hauling trips (vehicles that deliver materials to the site during construction) would generate an estimated 19,947,672 VMT along area roadways for the Project over the duration of construction activity (2). It is assumed that 50% of all vendor trips are from medium-heavy duty trucks (MHD), 50% of all vendor trips are from heavy-heavy duty trucks (HHD). These assumptions are consistent with the CalEEMod defaults utilized within the within the AQIA (2).

Vehicle fuel efficiencies for MHDs and HHDs were estimated using information generated within EMFAC2021. EMFAC2021 was run for the MHD and HHD vehicle classes within the California sub-area for the 2026 through 2031 calendar years. Data from EMFAC2021 is shown in Appendix 4.7.

Based on Table 4-8, it is estimated that 2,481,028 gallons of fuel will be consumed related to construction vendor and hauling trips during full construction of the Project. It should be noted that Project construction vendor and hauling trips would represent a "single-event" diesel fuel demand and would not require on-going or permanent commitment of diesel fuel resources for this purpose.

TABLE 4-8: CONSTRUCTION VENDOR/HAULING FUEL CONSUMPTION ESTIMATES

Year	Construction Activity	Duration (Days)	Vendor/ Hauling Trips/Day	Trip Length (miles)	VMT	Average Vehicle Fuel Economy (mpg)	Estimated Fuel Consumption (gallons)
2026	MHDT						
	Demolition	60	38	10.2	23,256	8.67	2,682
	Site Preparation	48	30	10.2	14,688	8.67	1,694
	Grading	144	90	10.2	132,192	8.67	15,244
	Building Construction	9	775	10.2	71,145	8.67	8,204
	HHDT (Vendor)						
	Demolition	60	38	10.2	23,256	6.64	3,503
	Site Preparation	48	30	10.2	14,688	6.64	2,212
	Grading	144	90	10.2	132,192	6.64	19,911
	Building Construction	9	775	10.2	71,145	6.64	10,716
	HHDT (Hauling)						
	Demolition	60	2	25	3,000	6.64	452

Year	Construction Activity	Duration (Days)	Vendor/ Hauling Trips/Day	Trip Length (miles)	VMT	Average Vehicle Fuel Economy (mpg)	Estimated Fuel Consumption (gallons)
2027	MHDT						
	Building Construction	261	775	10.2	2,063,205	8.81	234,113
	HHDT (Vendor)						
	Building Construction	261	775	10.2	2,063,205	6.80	303,436
2028	MHDT						
	Building Construction	260	775	10.2	2,055,300	9.02	227,828
	HHDT (Vendor)						
	Building Construction	260	775	10.2	2,055,300	6.98	294,475
2029	MHDT						
	Building Construction	261	775	10.2	2,063,205	9.29	222,179
	HHDT (Vendor)						
	Building Construction	260	775	10.2	2,055,300	6.98	294,475
2030	MHDT						
	Building Construction	261	775	10.2	2,063,205	9.61	214,596
	HHDT (Vendor)						
	Building Construction	261	775	10.2	2,063,205	7.36	280,372
2031	MHDT						
	Building Construction	188	775	10.2	1,486,140	10.02	148,276
	HHDT (Vendor)						
	Building Construction	188	775	10.2	1,486,140	7.56	196,660
TOTAL CONSTRUCTION VENDOR/HAULING FUEL CONSUMPTION							***2,481,028***

4.3.7 CONSTRUCTION ENERGY EFFICIENCY/CONSERVATION MEASURES

Starting in 2014, CARB adopted the nation's first regulation aimed at cleaning up off-road construction equipment such as bulldozers, graders, and backhoes. These requirements ensure fleets gradually turnover the oldest and dirtiest equipment to newer, cleaner models and prevent fleets from adding older, dirtier equipment. As such, the equipment used for Project construction would conform to CARB regulations and California emissions standards. It should also be noted that there are no unusual Project characteristics or construction processes that would require the use of equipment that would be more energy intensive than is used for comparable activities; or equipment that would not conform to current emissions standards (and related fuel efficiencies). Equipment utilized in the construction of the Project would therefore not result in inefficient wasteful, or unnecessary consumption of fuel.

Construction contractors would be required to comply with applicable CARB regulation regarding retrofitting, repowering, or replacement of diesel off-road construction equipment. Additionally, CARB has adopted the Airborne Toxic Control Measure to limit heavy-duty diesel motor vehicle idling in order to reduce public exposure to diesel particulate matter and other Toxic Air Contaminants. Compliance with anti-idling and emissions regulations would result in a more efficient use of construction-related energy and the minimization or elimination of wasteful or unnecessary consumption of energy. Idling restrictions and the use of newer engines and equipment would result in less fuel combustion and energy consumption.

Additional construction-source energy efficiencies would occur due to required California regulations and best available control measures (BACM). For example, CCR Title 13, Motor Vehicles, Section 2449(d)(3) Idling, limits idling times of construction vehicles to no more than five minutes, thereby precluding unnecessary and wasteful consumption of fuel due to unproductive idling of construction equipment. Section 2449(d)(3) requires that grading plans shall reference the requirement that a sign must be posted on-site stating that construction workers need to shut off engines at or before five minutes of idling." In this manner, construction equipment operators are required to be informed that engines are to be turned off at or prior to five minutes of idling.

A full analysis related to the energy needed to form construction materials is not included in this analysis because at this time, an analysis of the energy needed to create Project-related construction materials would be extremely speculative and thus has not been prepared.

In general, construction processes promote conservation and efficient use of energy by reducing raw materials demands, with related reduction in energy demands associated with raw materials extraction, transportation, processing, and refinement. Use of materials in bulk reduces energy demands associated with preparation and transport of construction materials as well as the transport and disposal of construction waste and solid waste in general, with corollary reduced demands on area landfill capacities and energy consumed by waste transport and landfill operations.

4.4 OPERATIONAL ENERGY DEMANDS

Energy consumption in support of or related to Project operations would include transportation fuel demands (fuel consumed by passenger car and truck vehicles accessing the Project site), fuel demands from operational equipment, and facilities energy demands (energy consumed by building operations and site maintenance activities).

4.4.1 TRANSPORTATION FUEL DEMANDS

Energy that would be consumed by Project-generated traffic is a function of total VMT and estimated vehicle fuel economies of vehicles accessing the Project site. The VMT per vehicle class was determined by evaluating the vehicle fleet mix and the total VMT. As with worker and vendors trips, operational vehicle fuel efficiencies were estimated using information generated within EMFAC2021 developed by CARB (24). EMFAC2021 was run for the Los Angeles County (Mojave Desert) area for the 2031 and 2040 calendar years. Data from EMFAC2021 is shown in Appendix 4.7.

In order to account for the possibility of refrigerated uses (cold storage) that would be accommodated by the up to 1,007,195-sf of high-cube cold storage use identified for PAs 2, 4, 6 East, 7, and 8 and up to 1,448,370-sf of high-cube cold storage use identified for the Annexation Area, it is assumed that all trucks accessing this land use are presumed to also have transport refrigeration units (TRUs). Therefore, for modeling purposes 756 two-way truck trips with TRUs were modeled for PAs 2, 4, 6 East, 7, and 8, and 1,088 two-way truck trips with TRUs were modeled for the remaining Annexation Area. TRUs are also accounted for during on-site and off-site travel. TRU calculations are based on EMFAC2021.

The estimated transportation energy demands are summarized in Tables 4-9 and 4-10. As summarized on Table 4-9 the buildout of PAs 2, 4, 6 East, 7, and 8 in 2031 would result in 71,284,107 annual VMT and an estimated annual fuel consumption of 6,210,252 gallons of fuel. As summarized on Table 4-10, the buildout of PAs 2, 4, 6 East, 7, and 8, the western portion of PA 6, PAs 1, 3, and 5, as well as the remaining Annexation area in 2040 would result in 600,167,614 annual VMT and an estimated annual fuel consumption of 32,009,457 gallons of fuel.

TABLE 4-9: TOTAL PROJECT-GENERATED TRAFFIC ANNUAL FUEL CONSUMPTION (2031)

Vehicle Type	Average Vehicle Fuel Economy (mpg)	Annual VMT	Estimated Annual Fuel Consumption (gallons)
PAs 2, 4, 6 East, 7, 8 (2031)			
LDA	36.51	15,214,778	416,740
LDT1	27.93	972,997	34,834
LDT2	28.78	4,968,247	172,641
MDV	23.19	3,525,142	152,027
LHDT1	19.60	6,868,205	350,494
LHDT2	18.27	2,071,290	113,347
MHDT	10.02	8,827,984	880,788
HHDT	7.56	28,138,036	3,723,480
MCY	42.72	697,428	16,324
TRUs			349,577
TOTAL PROJECT BUILDOUT 2031 (ALL VEHICLES)		***71,284,107***	***6,210,252***

TABLE 4-10: TOTAL PROJECT-GENERATED TRAFFIC ANNUAL FUEL CONSUMPTION (2040)

Vehicle Type	Average Vehicle Fuel Economy (mpg)	Annual VMT	Estimated Annual Fuel Consumption (gallons)
PAs 2, 4, 6 East, 7, 8 (2040)			
LDA	41.21	15,157,189	367,797
LDT1	31.70	805,945	25,426
LDT2	31.70	5,343,839	168,573

Vehicle Type	Average Vehicle Fuel Economy (mpg)	Annual VMT	Estimated Annual Fuel Consumption (gallons)
MDV	26.10	3,387,142	129,770
LHDT1	28.33	6,844,700	241,579
LHDT2	25.33	2,097,363	82,799
MHDT	14.93	8,830,519	591,602
HHDT	8.77	28,146,117	3,210,106
MCY	43.13	684,477	15,869
TRUs			349,176
	TOTAL (ALL VEHICLES)	***71,297,290***	***5,182,697***
PA 6 West (2040)			
LDA	41.21	7,762,055	188,350
LDT1	31.70	412,728	13,021
LDT2	31.70	2,736,601	86,327
MDV	26.10	1,734,568	66,456
LHDT1	28.33	1,130,472	39,899
LHDT2	25.33	346,401	13,675
MHDT	14.93	1,733,631	116,145
HHDT	8.77	5,074,055	578,703
OBUS	8.79	2,198	250
UBUS	14.37	3,010	209
MCY	43.13	350,524	8,127
SBUS	10.53	11,474	1,090
MH	6.12	11,700	1,911
	TOTAL (ALL VEHICLES)	***21,309,418***	***1,114,163***
PA 1, 3, 5 (2040)			
LDA	41.21	64,111,514	1,555,698
LDT1	31.70	3,408,968	107,548
LDT2	31.70	22,603,242	713,027
MDV	26.10	14,326,851	548,899
LHDT1	28.33	13,527,675	477,450
LHDT2	25.33	4,145,170	163,641
MHDT	14.93	17,452,394	1,169,226
HHDT	8.77	55,627,208	6,344,364
MCY	43.13	2,895,186	67,123
TRUs			716,860
	TOTAL (ALL VEHICLES)	***198,098,208***	***11,863,836***

Vehicle Type	Average Vehicle Fuel Economy (mpg)	Annual VMT	Estimated Annual Fuel Consumption (gallons)
Annexation Area (2040)			
LDA	41.21	137,852,274	3,345,055
LDT1	31.70	7,329,947	231,249
LDT2	31.70	48,601,383	1,533,148
MDV	26.10	30,805,527	1,180,240
LHDT1	28.33	13,049,451	460,571
LHDT2	25.33	3,998,631	157,856
MHDT	14.93	15,691,856	1,051,278
HHDT	8.77	45,068,027	5,140,074
OBUS	8.79	65,077	7,400
UBUS	14.37	89,133	6,201
MCY	43.13	6,225,216	144,327
SBUS	10.53	339,735	32,266
MH	6.12	346,440	56,583
TRUs			502,513
	TOTAL (ALL VEHICLES)	***309,462,698***	***13,848,761***
TOTAL PROJECT BUILDOUT 2040 (ALL VEHICLES)		***600,167,614***	***32,009,457***

4.4.2 STATIONARY SOURCES

Fuel consumption estimates from stationary sources are presented in Table 4-11. As previously stated, the aggregate fuel consumption rate for all equipment is estimated at 18.5 hp-hr-gal., obtained from CARB 2018 Emissions Factors Tables and cited fuel consumption rate factors presented in Table D-24 of the Moyer guidelines. The proposed Project was conservatively assumed to include installation of up to eleven 300 horsepower diesel-powered fire pumps and seven 700 horsepower diesel-powered emergency generators for PAs 2, 4, 6 East, 7, and 8. Additionally, the analysis assumed that up to two 300 horsepower diesel-powered fire pumps would be included in the western portion of PA 6. Although it is not known at this time whether emergency engines would be included in PAs 1, 3, and 5 or the remaining Annexation Area, it was conservatively estimated that PAs 1, 3, and 5 would include 14 emergency generators and 20 emergency fire pumps, while the Annexation Area would include 10 emergency generators and 14 emergency fire pumps. Diesel fuel would be supplied by existing industrial fuel providers serving the City and region. As presented in Table 4-11, Project stationary sources would consume an estimated 74,946 gallons of diesel fuel per year.

TABLE 4-11: STATIONARY SOURCE EQUIPMENT FUEL CONSUMPTION ESTIMATES

Equipment	HP Rating	Quantity	Usage Hours	Annual Hourly Usage	Load Factor	HP-hrs/day	Total Fuel Consumption

PAs 2, 4, 6 East, 7, 8							
Fire Pump	300	11	1	50	0.73	3,300	6,214
Emergency Generator	700	7	1	50	0.73	4,900	9,227
PA 6 West							
Fire Pump	300	2	1	50	0.73	600	1,130
PAs 1, 3, 5							
Fire Pump	300	14	1	50	0.73	4,200	7,909
Emergency Generator	700	20	1	50	0.73	14,000	26,363
Annexation Area							
Fire Pump	300	10	1	50	0.73	3,000	5,649
Emergency Generator	700	14	1	50	0.73	9,800	18,454
STATIONARY SOURCE FUEL DEMAND (GALLONS DIESEL FUEL)							***74,946***

4.4.3 ON-SITE CARGO HANDLING EQUIPMENT FUEL DEMANDS

It is common for warehouse buildings to require the operation of exterior cargo handling equipment in the building's truck court areas. Based on data provided by the Project Applicant, all on-site operational equipment will be zero-emission.

It was assumed that PA 6 (west) would utilize 7 pieces of on-site operational equipment, PAs 1, 3, and 5 would utilize 74 pieces of operational equipment, and the industrial portions of the Annexation Area would utilize 52 pieces of operational equipment. It was assumed that each of these pieces of equipment would be in the cargo handling – port tractor category and powered by natural gas. Further, it was assumed that each piece of equipment would be rated at 175 horsepower and operate for 4 hours per day[8] for 365 days of the year. Table 4-12 below presents the estimated fuel annual fuel consumption estimates for operational cargo-handling equipment.

TABLE 4-12: ON-SITE CARGO HANDLING EQUIPMENT FUEL CONSUMPTION ESTIMATES

Area	Duration (Days)	Quantity	Usage Hours	Fuel Consumption (gal./yr)	Activity (hrs./yr)	Total Fuel Consumption (gal. fuel)
PA 6 West	365	7	4	20,972	6,596	32,493
PAs 1, 3, 5	365	74	4	20,972	6,596	343,499
Annexation Area	365	52	4	20,972	6,596	241,378
ON-SITE EQUIPMENT FUEL DEMAND (GALLONS FUEL)						***617,371***

[8] Based on Table II-3, Port and Rail Cargo Handling Equipment Demographics by Type, from CARB's Technology Assessment: Mobile Cargo Handling Equipment document, a single piece of equipment could operate up to 2 hours per day (Total Average Annual Activity divided by Total Number Pieces of Equipment). As such, the analysis conservatively assumes that the tractor/loader/backhoe would operate up to 4 hours per day.

4.4.4 FACILITY ENERGY DEMANDS

Project building operations activities would result in the consumption of electricity, which would be supplied to the Project by Lancaster Choice Energy. Annual electricity demands of the Project are summarized in Tables 4-13 and 4-14. As summarized on Table 4-13, the buildout of PAs 2, 4, 6 East, 7, and 8 in 2031 would result in 81,049,659 kWh/year of electricity demand. As summarized on Table 4-14, the buildout of PAs 2, 4, 6 East, 7, and 8, the western portion of PA 6, PAs 1, 3, and 5, as well as the remaining Annexation area in 2040 would result in 368,977,905 kWh/year of electricity demand.

PAs 2, 4, 6 (east half), 7, and 8 would not utilize natural gas. However, because specific information for PAs 1, 3, and 5, PA 6 (west half), and the remaining Annexation Area is not available, it was conservatively assumed that land uses in these areas would utilize natural gas, and usage was estimated based on CalEEMod defaults. As shown on Table 4-14, PA 6 (west half), PAs 1, 3, 5, and the Annexation Area would result in 902,924,272 kBTU per year of natural gas usage.

TABLE 4-13: PROJECT ANNUAL OPERATIONAL ENERGY DEMAND SUMMARY (2031)

Land Use	Electricity Demand (kWh/year)
PAs 2, 4, 6 East, 7, 8 (2031)	
Warehousing, High-Cube Parcel Hub, High-Cube Transload & Short-Term Storage	48,519,179
High-Cube Cold Storage	19,477,199
Parking Lot	13,053,280
TOTAL PROJECT BUILDOUT ENERGY DEMAND (2031)	***81,049,658***

TABLE 4-14: PROJECT ANNUAL OPERATIONAL ENERGY DEMAND SUMMARY (2040)

Land Use	Electricity Demand (kWh/year)	Natural Gas Demand (kBTU/year)
PAs 2, 4, 6 East, 7, 8 (2040)		
Warehousing, High-Cube Parcel Hub, High-Cube Transload & Short-Term Storage	48,519,179	0
High-Cube Cold Storage	19,477,199	0
Parking Lot	13,053,280	0
TOTAL PROJECT ENERGY DEMAND	***81,049,658***	***0***
PA 6 West (2040)		
General Office	1,069,217	1,520,788
High-Cube Transload/Short-Term Storage	9,150,447	37,686,254
Parking Lot	2,057,891	0

Land Use	Electricity Demand (kWh/year)	Natural Gas Demand (kBTU/year)
TOTAL PROJECT ENERGY DEMAND	***12,277,555***	***39,207,042***
PAs 1, 3, 5 (2040)		
Industrial Park	147,394,671	209,645,017
Warehouse	24,195,057	99,647,710
High-Cube Parcel Hub Warehouse	24,195,057	99,647,710
High-Cube Cold Storage Warehouse	39,987,109	51,806,573
TOTAL PROJECT ENERGY DEMAND	***81,049,658***	***460,747,010***
Annexation Area (2040)		
Industrial Park	103,241,472	146,844,252
Warehousing, High-Cube Parcel Hub Warehouse	33,894,487	139,594,959
High-Cube Cold Storage Warehouse	28,008,668	36,287,523
Single Family Detached Residential	4,957,609	27,563,114
Multifamily (Low-Rise) Residential	2,619,336	11,136,776
Mobile Home Park	2,085,044	13,389,247
Business Park	19,794,418	28,154,349
TOTAL PROJECT ENERGY DEMAND	***194,601,034***	***402,970,220***
TOTAL PROJECT BUILDOUT ENERGY DEMAND (2040)	***368,977,905***	***902,924,272***

4.4.5 OPERATIONAL ENERGY EFFICIENCY/CONSERVATION MEASURES

Energy efficiency/energy conservation attributes of the Project would be complemented by increasingly stringent state and federal regulatory actions addressing vehicle fuel economies and vehicle emissions standards; and enhanced building/utilities energy efficiencies mandated under California building codes (e.g., Title 24, California Green Building Standards Code).

ENHANCED VEHICLE FUEL EFFICIENCIES

Project annual fuel consumption estimates presented previously in Tables 4-9 and 4-10 represent likely potential maximums that would occur for the Project. Under subsequent future conditions, average fuel economies of vehicles accessing the Project site can be expected to improve as older, less fuel-efficient vehicles are removed from circulation, and in response to fuel economy and emissions standards imposed on newer vehicles entering the circulation system.

Enhanced fuel economies realized pursuant to federal and state regulatory actions, and related transition of vehicles to alternative energy sources (e.g., electricity, natural gas, biofuels, hydrogen cells) would likely decrease future gasoline fuel demands per VMT. Location of the Project proximate to regional and local roadway systems tends to reduce VMT within the region, acting to reduce regional vehicle energy demands.

4.5 SUMMARY

4.5.1 CONSTRUCTION ENERGY DEMANDS

The estimated power cost of on-site electricity usage during the construction of the Project is assumed to be approximately $2,057,281.55. Additionally, based on the assumed power cost, it is estimated that the total electricity usage during construction, after full Project buildout, is calculated to be approximately 12,858,010 kWh.

Construction equipment used by the Project would result in single event consumption of approximately 797,937 gallons of diesel fuel. Construction equipment use of fuel would not be atypical for the type of construction proposed because there are no aspects of the Project's proposed construction process that are unusual or energy-intensive, and Project construction equipment would conform to the applicable CARB emissions standards, acting to promote equipment fuel efficiencies.

CCR Title 13, Title 13, Motor Vehicles, Section 2449(d)(3) Idling, limits idling times of construction vehicles to no more than 5 minutes, thereby precluding unnecessary and wasteful consumption of fuel due to unproductive idling of construction equipment. BACMs inform construction equipment operators of this requirement.

Construction worker trips for full construction of the Project would result in the estimated fuel consumption of 3,836,297 gallons of fuel. Additionally, fuel consumption from construction vendor trips (MHDs and HHDs) will total approximately 2,474,416 gallons. Diesel fuel would be supplied by City and regional industrial vendors. Indirectly, construction energy efficiencies and energy conservation would be achieved using bulk purchases, transport and use of construction materials. The 2023 IEPR released by the CEC has shown that fuel efficiencies are getting better within on and off-road vehicle engines due to more stringent government requirements (18). As supported by the preceding discussions, Project construction energy consumption would not be considered inefficient, wasteful, or otherwise unnecessary.

4.5.2 OPERATIONAL ENERGY DEMANDS

TRANSPORTATION ENERGY DEMANDS

Annual vehicular trips and related VMT generated by the operation of the Project buildout of PAs 2, 4, 6 East, 7, and 8 in 2031 would result in a fuel demand of 6,210,253 gallons of fuel. Annual vehicular trips and related VMT generated by the operation of the Project buildout of PAs 2, 4, 6 East, 7, and 8, the western portion of PA 6, PAs 1, 3, and 5, as well as the remaining Annexation area in 2040 would result in a fuel demand of 32,009,457 gallons of fuel.

Fuel would be provided by current and future industrial vendors. Trip generation and VMT generated by the Project are consistent with other industrial uses of similar scale and configuration, as reflected respectively in the Institute of Transportation Engineers (ITE) Trip Generation Manual (11th Ed., 2021); and CalEEMod. As such, Project operations would not result in excessive and wasteful vehicle trips and VMT, nor excess and wasteful vehicle energy consumption compared to other industrial uses.

It should be noted that the state strategy for the transportation sector for medium and heavy-duty trucks is focused on making trucks more efficient and expediting truck turnover rather than reducing VMT from trucks. This is in contrast to the passenger vehicle component of the transportation sector where both per-capita VMT reductions and an increase in vehicle efficiency are forecasted to be needed to achieve the overall state emissions reductions goals.

Heavy duty trucks involved in goods movements are generally controlled on the technology side and through fleet turnover of older trucks and engines to newer and cleaner trucks and engines. The first battery-electric heavy-heavy duty trucks were tested in 2022 and AVAQMD is looking to integrate this new technology into large-scale truck operations. The following state strategies reduce GHG emissions from the medium and heavy-duty trucks:

- CARB's Mobile Source Strategy focuses on reducing GHGs through the transition to zero and low emission vehicles and from medium-duty and heavy-duty trucks.
- CARB's Sustainable Freight Action Plan establishes a goal to improve freight efficiency by 25% by 2030, deploy over 100,000 freight vehicles and equipment capable of zero emission operation and maximize both zero and near-zero emission freight vehicles and equipment powered by renewable energy by 2030.
- CARB's Emissions Reduction Plan for Ports and Goods Movement (Goods Movement Plan) in California focuses on reducing heavy-duty truck-related emissions focus on establishment of emissions standards for trucks, fleet turnover, truck retrofits, and restriction on truck idling (CARB 2006). While the focus of Goods Movement Plan is to reduce criteria air pollutant and air toxic emissions, the strategies to reduce these pollutants would also generally have a beneficial effect in reducing GHG emissions.
- CARB's On-Road Truck and Bus Regulation (2010) requires diesel trucks and buses that operate in California to be upgraded to reduce emissions. Newer heavier trucks and buses must meet particulate matter filter requirements beginning January 1, 2012. Lighter and older heavier trucks must be replaced starting January 1, 2015. By January 1, 2023, nearly all trucks and buses will need to have 2010 model year engines or equivalent (28).
- CARB's Heavy-Duty (Tractor-Trailer) GHG Regulation requires SmartWay tractor trailers that include idle-reduction technologies, aerodynamic technologies, and low-rolling resistant tires that would reduce fuel consumption and associated GHG emissions.

The proposed Project would implement project design features that would facilitate the accessibility, parking, and loading of trucks on-site.

Enhanced fuel economies realized pursuant to federal and state regulatory actions, and related transition of vehicles to alternative energy sources (e.g., electricity, natural gas, biofuels, hydrogen cells) would likely decrease future gasoline fuel demands per VMT. Location of the Project proximate to regional and local roadway systems tends to reduce VMT within the region, acting to reduce regional vehicle energy demands. The Project would implement sidewalks, facilitating and encouraging pedestrian access. Facilitating pedestrian and bicycle access would reduce VMT and associated energy consumption. In compliance with the California Green Building Standards Code and City requirements, 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. As supported by the preceding discussions, Project transportation energy consumption would not be considered inefficient, wasteful, or otherwise unnecessary.

ON-SITE CARGO HANDLING EQUIPMENT FUEL DEMANDS

It is common for warehouse buildings to require the operation of exterior cargo handling equipment in the building's truck court areas. For PAs 2, 4, 6 (east), 7, and 8, all on-site operational equipment will be zero-emission.

It was assumed that PA 6 (west) would utilize 7 pieces of on-site operational equipment, PAs 1, 3, and 5 would utilize 74 pieces of operational equipment, and the industrial portions of the Annexation Area would utilize 52 pieces of operational equipment. It was assumed that each of these pieces of equipment would be in the cargo handling – port tractor category and powered by natural gas. Further, it was assumed that each piece of equipment would be rated at 175 horsepower and operate for 4 hours per day[9] for 365 days of the year.

On-site equipment use of fuel would not be atypical for the type of activities proposed because there are no aspects of the Project's proposed operations that are unusual or energy-intensive, and Project on-site equipment would conform to the applicable CARB emissions standards, acting to promote equipment fuel efficiencies.

TABLE 4-14: CARGO HANDLING EQUIPMENT FUEL DEMAND

Area	Duration (Days)	Quantity	Usage Hours	Fuel Consumption (gal./yr)	Activity (hrs./yr)	Total Fuel Consumption (gal. fuel)
PA 6 West	365	7	4	20,972	6,596	32,493
PAs 1, 3, 5	365	74	4	20,972	6,596	343,499
Annexation Area	365	52	4	20,972	6,596	241,378
ON-SITE EQUIPMENT FUEL DEMAND (GALLONS FUEL)						***617,371***

FACILITY ENERGY DEMANDS

Project facility operational energy demands for the buildout of PAs 2, 4, 6 East, 7, and 8 in 2031 are estimated at 81,049,658 kWh/year of electricity. Additionally, Project facility operational energy demands for the buildout of PAs 2, 4, 6 East, 7, and 8, the western portion of PA 6, PAs 1, 3, and 5, as well as the remaining Annexation area in 2040 are estimated at 368,977,905 kWh/year of electricity. Electricity would be supplied by Lancaster Choice Energy. No natural gas is expected to be used for PAs 2, 4, 6 (east half), 7 or 8. However, the analysis conservatively assumed that PA 6 (west half), PAs 1, 3, and 5, and the Annexation Area would utilize natural gas, which would be provided to the site by SoCal Gas. As such, it is estimated that these portions of the Project would utilize approximately 902,924,272 kBTU per year of natural gas. The Project proposes conventional residential, industrial and commercial uses reflecting contemporary

[9] Based on Table II-3, Port and Rail Cargo Handling Equipment Demographics by Type, from CARB's Technology Assessment: Mobile Cargo Handling Equipment document, a single piece of equipment could operate up to 2 hours per day (Total Average Annual Activity divided by Total Number Pieces of Equipment). As such, the analysis conservatively assumes that the tractor/loader/backhoe would operate up to 4 hours per day.

energy efficient/energy conserving designs and operational programs. The Project does not propose uses that are inherently energy intensive and the energy demands in total would be comparable to other residential, industrial and commercial uses of similar scale and configuration.

Additionally, as required under MM AQ-22, the Project would be required to be designed such that the buildings can provide the structural capacity to accommodate roof-top solar panels, with capacity to meet at least 50% of the Project's operational base energy requirements from within the Project's building envelope. Further, the development of the Project would not preclude or hinder the incorporation of additional solar panels, or the installation of other renewable energy sources.

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5 CONCLUSIONS

5.1 ENERGY IMPACT 1

Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation.

As supported by the preceding analyses, Project construction and operations would not result in the inefficient, wasteful, or unnecessary consumption of energy. The Project would therefore not cause or result in the need for additional energy producing or transmission facilities. The Project would not engage in wasteful or inefficient uses of energy and aims to achieve energy conservations goals within the State of California.

5.2 ENERGY IMPACT 2

Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

The Project's consistency with the applicable state and local plans is discussed below.

CONSISTENCY WITH ISTEA

Transportation and access to the Project site is provided by the local and regional roadway systems. The Project would not interfere with, nor otherwise obstruct intermodal transportation plans or projects that may be realized pursuant to the ISTEA because SCAG is not planning for intermodal facilities on or through the Project site.

CONSISTENCY WITH TEA-21

The Project site is located along major transportation corridors with proximate access to the Interstate freeway system. The site selected for the Project facilitates access, acts to reduce VMT, takes advantage of existing infrastructure systems, and promotes land use compatibility through collocation of similar uses. The Project supports the strong planning processes emphasized under TEA-21. The Project is therefore consistent with, and would not otherwise interfere with, nor obstruct implementation of TEA-21.

CONSISTENCY WITH IEPR

Electricity would be provided to the Project by Lancaster Choice Energy. Lancaster Choice Energy's *Integrated Resource Plan* builds on existing state programs and policies. As such, the Project is consistent with, and would not otherwise interfere with, nor obstruct implementation the goals presented in the 2023 IEPR.

Additionally, the Project will comply with the applicable Title 24 standards which would ensure that the Project energy demands would not be inefficient, wasteful, or otherwise unnecessary. As such, development of the proposed Project would support the goals presented in the 2023 IEPR.

CONSISTENCY WITH STATE OF CALIFORNIA ENERGY PLAN

The Project site is located along major transportation corridors with proximate access to the Interstate freeway system. The site selected for the Project facilitates access and takes advantage of existing infrastructure systems. The Project therefore supports urban design and planning processes identified under the State of California Energy Plan, is consistent with, and would not otherwise interfere with, nor obstruct implementation of the State of California Energy Plan.

CONSISTENCY WITH CALIFORNIA CODE TITLE 24, PART 6, ENERGY EFFICIENCY STANDARDS

As previously stated, CCR, Title 24, Part 11: CALGreen is a comprehensive and uniform regulatory code for all residential, commercial, and school buildings that went in effect on January 1, 2009, and is administered by the California Building Standards Commission. CALGreen is updated on a regular basis, with the most recent approved update consisting of the 2022 California Green Building Code Standards that were published on July 1, 2022, and became effective on January 1, 2023. The Project would be required to comply with the applicable standards in place at the time plan check submittals are made.

CONSISTENCY WITH AB 1493

AB 1493 is not applicable to the Project as it is a statewide measure establishing vehicle emissions standards. No feature of the Project would interfere with implementation of the requirements under AB 1493.

CONSISTENCY WITH RPS

California's RPS is not applicable to the Project as it is a statewide measure that establishes a renewable energy mix. No feature of the Project would interfere with implementation of the requirements under RPS.

CONSISTENCY WITH SB 350

The proposed Project would use energy from Lancaster Choice Energy, which has committed to diversifying their portfolio of energy sources by increasing energy from wind and solar sources. No feature of the Project would interfere with implementation of SB 350. Additionally, the Project would be designed and constructed to implement the energy efficiency measures for new industrial developments and would include several measures designed to reduce energy consumption.

CONSISTENCY WITH CEQA APPENDIX F

As supported in the preceding sections, the Project would achieve the goals of energy conservation as identified in Appendix F of the State CEQA Guidelines. The Project would decrease overall per capita energy consumption by being consistent with the ISTEA, TEA-21, 2023 IEPR, State of California Energy Plan, and Title 24 Standards. The Project would decrease reliance on fossil fuels such as coal, natural gas and oil by being consistent with the ISTEA, TEA-21, 2023 IEPR, State of California Energy Plan, Title 24 Standards and AB 1493. The Project would increase reliance on renewable energy sources by being consistent with the 2023 IEPR, Title 24 Standards, RPS and SB 350.

As such, based on the preceding discussion and supporting evidence, a less than significant impact is expected with respect to CEQA Guidelines Appendix F criteria.

CONSISTENCY WITH CITY OF LANCASTER GENERAL PLAN

As stated in Section ES.2 of this study, energy-saving features and operational programs would be incorporated into facilities developed pursuant to the currently proposed Project. These measures would help with the City's goal of reducing energy usage and make Lancaster a more sustainable community.

As shown above, the Project would not conflict with any of the state or local plans. As such, a less than significant impact is expected.

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7 CERTIFICATIONS

The contents of this energy report represent an accurate depiction of the environmental impacts associated with the proposed Westside Annexation and North Lancaster Industrial Specific Plan. The information contained in this energy report is based on the best available data at the time of preparation. If you have any questions, please contact me directly at hqureshi@urbanxroads.com.

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EDUCATION

Master of Science in Environmental Studies
California State University, Fullerton • May, 2010

Bachelor of Arts in Environmental Analysis and Design
University of California, Irvine • June, 2006

PROFESSIONAL AFFILIATIONS

AEP – Association of Environmental Professionals
AWMA – Air and Waste Management Association
ASTM – American Society for Testing and Materials

PROFESSIONAL CERTIFICATIONS

Environmental Site Assessment – American Society for Testing and Materials • June, 2013
Planned Communities and Urban Infill – Urban Land Institute • June, 2011
Indoor Air Quality and Industrial Hygiene – EMSL Analytical • April, 2008
Principles of Ambient Air Monitoring – CARB • August, 2007
AB2588 Regulatory Standards – Trinity Consultants • November, 2006
Air Dispersion Modeling – Lakes Environmental • June, 2006

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APPENDIX 4.1:

CALEEMOD PAS 2, 4, 6 (EAST HALF), 7 & 8 CONSTRUCTION EMISSIONS MODEL OUTPUTS

16126 AVCC Construction Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	16126 AVCC Construction
Construction Start Date	1/1/2026
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	5.00
Precipitation (days)	13.0
Location	34.770310111475695, -118.17958119571927
County	Los Angeles-Mojave Desert
City	Unincorporated
Air District	Antelope Valley AQMD
Air Basin	Mojave Desert
TAZ	3673
EDFZ	7
Electric Utility	Southern California Edison
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	10,367	1000sqft	238	10,366,542	4,326,205	—	—	—

Refrigerated Warehouse-No Rail	1,007	1000sqft	23.1	1,007,195	0.00	—	—	—
Parking Lot	342	Acre	342	0.00	0.00	—	—	—
Other Asphalt Surfaces	91.6	Acre	91.6	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-5	Use Advanced Engine Tiers
Construction	C-13	Use Low-VOC Paints for Construction

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.	180	176	158	489	0.45	6.66	88.6	90.2	6.09	21.3	22.8	—	128,177	128,177	3.15	8.97	340	131,082
Mit.	72.2	69.3	73.9	498	0.45	0.82	88.6	89.2	0.78	21.3	21.9	—	128,177	128,177	3.15	8.97	340	131,082
% Reduced	60%	61%	53%	-2%	—	88%	—	1%	87%	—	4%	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	178	174	158	355	0.45	6.66	88.6	90.2	6.09	21.3	22.8	—	119,808	119,808	3.36	9.01	9.74	122,473
Mit.	70.1	67.1	82.1	365	0.45	0.89	88.6	89.2	0.78	21.3	21.9	—	119,808	119,808	3.36	9.01	9.74	122,473
% Reduced	61%	62%	48%	-3%	—	87%	—	1%	87%	—	4%	—	—	—	—	—	—	—

Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	109	107	88.0	268	0.32	3.81	61.3	62.3	3.47	14.7	15.8	—	85,142	85,142	2.40	6.41	105	87,109
Mit.	44.6	42.6	57.3	274	0.32	0.52	61.3	61.7	0.46	14.7	15.2	—	85,142	85,142	2.40	6.41	105	87,109
% Reduced	59%	60%	35%	-2%	—	86%	—	1%	87%	—	4%	—	—	—	—	—	—	—
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	20.0	19.5	16.1	48.9	0.06	0.70	11.2	11.4	0.63	2.69	2.88	—	14,096	14,096	0.40	1.06	17.4	14,422
Mit.	8.15	7.78	10.5	50.0	0.06	0.09	11.2	11.3	0.08	2.69	2.77	—	14,096	14,096	0.40	1.06	17.4	14,422
% Reduced	59%	60%	35%	-2%	—	86%	—	1%	87%	—	4%	—	—	—	—	—	—	—

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	21.2	17.8	158	151	0.40	6.66	22.9	28.8	6.09	10.9	16.4	—	45,589	45,589	1.64	1.12	18.2	45,982
2027	32.9	29.6	93.9	471	0.42	1.35	75.7	77.0	1.27	18.3	19.6	—	118,659	118,659	3.15	8.97	340	121,752
2028	30.1	26.7	88.6	445	0.42	1.25	75.7	76.9	1.18	18.3	19.5	—	116,373	116,373	3.15	8.62	309	119,330
2029	28.6	25.7	83.7	419	0.42	1.18	75.7	76.9	1.11	18.3	19.4	—	114,060	114,060	3.05	8.62	279	116,985
2030	180	176	97.4	489	0.45	1.61	88.6	90.2	1.51	21.3	22.8	—	128,177	128,177	1.39	8.66	288	131,082
2031	177	175	94.8	463	0.45	1.54	88.6	90.1	1.45	21.3	22.8	—	125,649	125,649	1.26	8.66	258	128,520
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	39.4	38.4	158	352	0.45	6.66	75.7	77.5	6.09	18.3	19.7	—	113,094	113,094	3.36	9.01	9.74	115,872
2027	28.8	25.2	98.5	335	0.45	1.35	75.7	77.0	1.27	18.3	19.6	—	111,308	111,308	3.36	8.97	8.82	114,074

2028	27.9	24.4	92.8	318	0.42	1.25	75.7	76.9	1.18	18.3	19.5	—	109,169	109,169	3.26	8.62	8.00	111,828
2029	26.5	23.6	88.0	299	0.42	1.18	75.7	76.9	1.11	18.3	19.4	—	106,995	106,995	1.31	8.62	7.22	109,605
2030	178	174	102	355	0.45	1.61	88.6	90.2	1.51	21.3	22.8	—	119,808	119,808	1.52	8.79	7.46	122,473
2031	175	173	97.2	335	0.45	1.54	88.6	90.1	1.45	21.3	22.8	—	117,432	117,432	1.52	8.66	6.69	120,058
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	17.6	15.7	88.0	95.9	0.21	3.81	10.1	13.9	3.47	3.42	6.89	—	24,835	24,835	0.88	0.76	7.54	25,091
2027	20.7	18.1	71.6	264	0.30	0.96	53.6	54.6	0.91	13.0	13.9	—	80,703	80,703	2.40	6.41	105	82,777
2028	20.2	17.7	68.0	249	0.30	0.89	53.8	54.7	0.84	13.0	13.8	—	79,368	79,368	2.33	6.18	95.4	81,362
2029	19.1	16.9	64.0	235	0.30	0.84	53.6	54.5	0.80	13.0	13.8	—	77,576	77,576	0.94	6.16	86.1	79,521
2030	109	107	72.6	268	0.32	1.10	61.3	62.3	1.03	14.7	15.8	—	85,142	85,142	1.05	6.22	86.9	87,109
2031	89.7	88.9	50.9	188	0.23	0.79	45.0	45.8	0.74	10.8	11.6	—	61,171	61,171	0.78	4.51	57.1	62,591
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	3.22	2.87	16.1	17.5	0.04	0.70	1.84	2.54	0.63	0.62	1.26	—	4,112	4,112	0.15	0.13	1.25	4,154
2027	3.77	3.31	13.1	48.1	0.05	0.18	9.79	9.96	0.17	2.37	2.53	—	13,361	13,361	0.40	1.06	17.4	13,705
2028	3.68	3.22	12.4	45.5	0.05	0.16	9.81	9.98	0.15	2.37	2.53	—	13,140	13,140	0.39	1.02	15.8	13,470
2029	3.48	3.08	11.7	42.9	0.05	0.15	9.79	9.94	0.15	2.37	2.51	—	12,844	12,844	0.15	1.02	14.3	13,166
2030	20.0	19.5	13.2	48.9	0.06	0.20	11.2	11.4	0.19	2.69	2.88	—	14,096	14,096	0.17	1.03	14.4	14,422
2031	16.4	16.2	9.29	34.4	0.04	0.14	8.22	8.36	0.14	1.98	2.11	—	10,128	10,128	0.13	0.75	9.45	10,363

2.3. Construction Emissions by Year, Mitigated

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	4.45	4.35	28.5	212	0.40	0.82	22.9	23.3	0.78	10.9	11.3	—	45,589	45,589	1.64	1.12	18.2	45,982
2027	30.3	27.5	73.9	479	0.42	0.54	75.7	76.2	0.54	18.3	18.8	—	118,659	118,659	3.15	8.97	340	121,752
2028	27.6	24.7	70.1	453	0.42	0.54	75.7	76.2	0.54	18.3	18.8	—	116,373	116,373	3.15	8.62	309	119,330

2029	26.2	23.8	66.4	427	0.42	0.54	75.7	76.2	0.54	18.3	18.8	—	114,060	114,060	3.05	8.62	279	116,985
2030	72.2	69.3	71.7	498	0.45	0.60	88.6	89.2	0.60	21.3	21.9	—	128,177	128,177	1.39	8.66	288	131,082
2031	69.0	68.4	70.3	472	0.45	0.60	88.6	89.2	0.60	21.3	21.9	—	125,649	125,649	1.26	8.66	258	128,520
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	35.0	34.7	82.1	360	0.45	0.89	75.7	76.6	0.78	18.3	18.8	—	113,094	113,094	3.36	9.01	9.74	115,872
2027	26.2	23.2	78.4	343	0.45	0.54	75.7	76.2	0.54	18.3	18.8	—	111,308	111,308	3.36	8.97	8.82	114,074
2028	25.4	22.4	74.3	326	0.42	0.54	75.7	76.2	0.54	18.3	18.8	—	109,169	109,169	3.26	8.62	8.00	111,828
2029	24.1	21.7	70.7	307	0.42	0.54	75.7	76.2	0.54	18.3	18.8	—	106,995	106,995	1.31	8.62	7.22	109,605
2030	70.1	67.1	76.7	365	0.45	0.60	88.6	89.2	0.60	21.3	21.9	—	119,808	119,808	1.52	8.79	7.46	122,473
2031	66.8	66.2	72.7	345	0.45	0.60	88.6	89.2	0.60	21.3	21.9	—	117,432	117,432	1.52	8.66	6.69	120,058
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	8.41	8.26	16.5	119	0.21	0.52	10.1	10.6	0.46	3.42	3.89	—	24,835	24,835	0.88	0.76	7.54	25,091
2027	18.8	16.7	57.3	269	0.30	0.39	53.6	54.0	0.38	13.0	13.3	—	80,703	80,703	2.40	6.41	105	82,777
2028	18.4	16.3	54.8	255	0.30	0.39	53.8	54.2	0.39	13.0	13.4	—	79,368	79,368	2.33	6.18	95.4	81,362
2029	17.4	15.5	51.7	241	0.30	0.39	53.6	54.0	0.38	13.0	13.3	—	77,576	77,576	0.94	6.16	86.1	79,521
2030	44.6	42.6	55.2	274	0.32	0.42	61.3	61.7	0.42	14.7	15.2	—	85,142	85,142	1.05	6.22	86.9	87,109
2031	34.4	34.0	38.3	193	0.23	0.31	45.0	45.4	0.31	10.8	11.1	—	61,171	61,171	0.78	4.51	57.1	62,591
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	1.53	1.51	3.01	21.7	0.04	0.09	1.84	1.94	0.08	0.62	0.71	—	4,112	4,112	0.15	0.13	1.25	4,154
2027	3.43	3.04	10.5	49.2	0.05	0.07	9.79	9.86	0.07	2.37	2.44	—	13,361	13,361	0.40	1.06	17.4	13,705
2028	3.36	2.97	10.00	46.5	0.05	0.07	9.81	9.88	0.07	2.37	2.44	—	13,140	13,140	0.39	1.02	15.8	13,470
2029	3.17	2.84	9.43	44.0	0.05	0.07	9.79	9.86	0.07	2.37	2.44	—	12,844	12,844	0.15	1.02	14.3	13,166
2030	8.15	7.78	10.1	50.0	0.06	0.08	11.2	11.3	0.08	2.69	2.77	—	14,096	14,096	0.17	1.03	14.4	14,422
2031	6.27	6.21	6.99	35.2	0.04	0.06	8.22	8.28	0.06	1.98	2.03	—	10,128	10,128	0.13	0.75	9.45	10,363

3. Construction Emissions Details

3.1. 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	39.2	38.2	39.7	83.0	0.06	2.20	—	2.20	1.93	—	1.93	—	6,506	6,506	0.26	0.05	—	6,528
Demolition	—	—	—	—	—	—	0.12	0.12	—	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	6.45	6.28	6.52	13.7	0.01	0.36	—	0.36	0.32	—	0.32	—	1,069	1,069	0.04	0.01	—	1,073
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	1.18	1.15	1.19	2.49	< 0.005	0.07	—	0.07	0.06	—	0.06	—	177	177	0.01	< 0.005	—	178
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.14	0.11	0.14	1.57	0.00	0.00	0.33	0.33	0.00	0.08	0.08	—	315	315	0.02	0.01	0.03	319
Vendor	0.08	0.05	2.32	0.87	0.02	0.03	0.64	0.68	0.02	0.18	0.19	—	2,210	2,210	< 0.005	0.32	0.15	2,305
Hauling	< 0.005	< 0.005	0.14	0.03	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	133	133	< 0.005	0.02	0.01	139
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.03	0.29	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	53.3	53.3	< 0.005	< 0.005	0.10	54.0
Vendor	0.01	0.01	0.38	0.14	< 0.005	0.01	0.10	0.11	< 0.005	0.03	0.03	—	363	363	< 0.005	0.05	0.40	379
Hauling	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	21.8	21.8	< 0.005	< 0.005	0.02	22.8
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	8.82	8.82	< 0.005	< 0.005	0.02	8.95
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	60.1	60.1	< 0.005	0.01	0.07	62.8
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.61	3.61	< 0.005	< 0.005	< 0.005	3.78

3.2. Demolition (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	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	34.8	34.6	7.87	81.5	0.06	0.71	—	0.71	0.56	—	0.56	—	6,506	6,506	0.26	0.05	—	6,528
Demolition	—	—	—	—	—	—	0.12	0.12	—	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	5.72	5.68	1.29	13.4	0.01	0.12	—	0.12	0.09	—	0.09	—	1,069	1,069	0.04	0.01	—	1,073
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	1.04	1.04	0.24	2.44	< 0.005	0.02	—	0.02	0.02	—	0.02	—	177	177	0.01	< 0.005	—	178
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.14	0.11	0.14	1.57	0.00	0.00	0.33	0.33	0.00	0.08	0.08	—	315	315	0.02	0.01	0.03	319
Vendor	0.08	0.05	2.32	0.87	0.02	0.03	0.64	0.68	0.02	0.18	0.19	—	2,210	2,210	< 0.005	0.32	0.15	2,305
Hauling	< 0.005	< 0.005	0.14	0.03	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	133	133	< 0.005	0.02	0.01	139

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.03	0.29	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	53.3	53.3	< 0.005	< 0.005	0.10	54.0
Vendor	0.01	0.01	0.38	0.14	< 0.005	0.01	0.10	0.11	< 0.005	0.03	0.03	—	363	363	< 0.005	0.05	0.40	379
Hauling	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	21.8	21.8	< 0.005	< 0.005	0.02	22.8
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	8.82	8.82	< 0.005	< 0.005	0.02	8.95
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	60.1	60.1	< 0.005	0.01	0.07	62.8
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.61	3.61	< 0.005	< 0.005	< 0.005	3.78

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	16.0	13.4	122	107	0.18	5.90	—	5.90	5.43	—	5.43	—	19,685	19,685	0.80	0.16	—	19,753
Dust From Material Movement	—	—	—	—	—	—	21.7	21.7	—	10.6	10.6	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	16.0	13.4	122	107	0.18	5.90	—	5.90	5.43	—	5.43	—	19,685	19,685	0.80	0.16	—	19,753

Dust From Material Movement	—	—	—	—	—	—	21.7	21.7	—	10.6	10.6	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	2.10	1.76	16.0	14.0	0.02	0.78	—	0.78	0.71	—	0.71	—	2,589	2,589	0.11	0.02	—	2,598
Dust From Material Movement	—	—	—	—	—	—	2.85	2.85	—	1.40	1.40	—	—	—	—	—	—	—
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.38	0.32	2.92	2.56	< 0.005	0.14	—	0.14	0.13	—	0.13	—	429	429	0.02	< 0.005	—	430
Dust From Material Movement	—	—	—	—	—	—	0.52	0.52	—	0.26	0.26	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	0.31	0.29	0.27	4.88	0.00	0.00	0.69	0.69	0.00	0.16	0.16	—	744	744	0.03	0.03	2.83	756
Vendor	0.07	0.05	1.77	0.67	0.01	0.03	0.51	0.54	0.01	0.14	0.16	—	1,766	1,766	< 0.005	0.25	4.55	1,847
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	0.24	0.30	3.30	0.00	0.00	0.69	0.69	0.00	0.16	0.16	—	662	662	0.03	0.03	0.07	670
Vendor	0.06	0.04	1.86	0.69	0.01	0.03	0.51	0.54	0.01	0.14	0.16	—	1,768	1,768	< 0.005	0.25	0.12	1,844
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	0.04	0.03	0.04	0.49	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	89.5	89.5	< 0.005	< 0.005	0.16	90.8
Vendor	0.01	0.01	0.24	0.09	< 0.005	< 0.005	0.07	0.07	< 0.005	0.02	0.02	—	232	232	< 0.005	0.03	0.26	243
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	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	0.09	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	14.8	14.8	< 0.005	< 0.005	0.03	15.0
Vendor	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	38.5	38.5	< 0.005	0.01	0.04	40.2
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

3.4. Site Preparation (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	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	1.85	1.85	9.62	103	0.18	0.37	—	0.37	0.37	—	0.37	—	19,685	19,685	0.80	0.16	—	19,753
Dust From Material Movement	—	—	—	—	—	—	21.7	21.7	—	10.6	10.6	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	1.85	1.85	9.62	103	0.18	0.37	—	0.37	0.37	—	0.37	—	19,685	19,685	0.80	0.16	—	19,753
Dust From Material Movement	—	—	—	—	—	—	21.7	21.7	—	10.6	10.6	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	0.24	0.24	1.27	13.5	0.02	0.05	—	0.05	0.05	—	0.05	—	2,589	2,589	0.11	0.02	—	2,598
Dust From Material Movement	—	—	—	—	—	—	2.85	2.85	—	1.40	1.40	—	—	—	—	—	—	—
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.23	2.47	< 0.005	0.01	—	0.01	0.01	—	0.01	—	429	429	0.02	< 0.005	—	430
Dust From Material Movement	—	—	—	—	—	—	0.52	0.52	—	0.26	0.26	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	0.31	0.29	0.27	4.88	0.00	0.00	0.69	0.69	0.00	0.16	0.16	—	744	744	0.03	0.03	2.83	756
Vendor	0.07	0.05	1.77	0.67	0.01	0.03	0.51	0.54	0.01	0.14	0.16	—	1,766	1,766	< 0.005	0.25	4.55	1,847
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	0.24	0.30	3.30	0.00	0.00	0.69	0.69	0.00	0.16	0.16	—	662	662	0.03	0.03	0.07	670
Vendor	0.06	0.04	1.86	0.69	0.01	0.03	0.51	0.54	0.01	0.14	0.16	—	1,768	1,768	< 0.005	0.25	0.12	1,844
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	0.04	0.03	0.04	0.49	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	89.5	89.5	< 0.005	< 0.005	0.16	90.8
Vendor	0.01	0.01	0.24	0.09	< 0.005	< 0.005	0.07	0.07	< 0.005	0.02	0.02	—	232	232	< 0.005	0.03	0.26	243
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	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	0.09	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	14.8	14.8	< 0.005	< 0.005	0.03	15.0
Vendor	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	38.5	38.5	< 0.005	0.01	0.04	40.2
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

3.5. 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	20.5	17.2	152	141	0.36	6.58	—	6.58	6.05	—	6.05	—	39,085	39,085	1.59	0.32	—	39,219
Dust From Material Movement	—	—	—	—	—	—	10.8	10.8	—	3.24	3.24	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	20.5	17.2	152	141	0.36	6.58	—	6.58	6.05	—	6.05	—	39,085	39,085	1.59	0.32	—	39,219
Dust From Material Movement	—	—	—	—	—	—	10.8	10.8	—	3.24	3.24	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	8.07	6.78	60.0	55.7	0.14	2.60	—	2.60	2.39	—	2.39	—	15,420	15,420	0.63	0.13	—	15,473
Dust From Material Movement	—	—	—	—	—	—	4.25	4.25	—	1.28	1.28	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	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	1.47	1.24	11.0	10.2	0.03	0.47	—	0.47	0.44	—	0.44	—	2,553	2,553	0.10	0.02	—	2,562

Dust From Material Movement	—	—	—	—	—	—	0.77	0.77	—	0.23	0.23	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	0.47	0.45	7.91	0.00	0.00	1.11	1.11	0.00	0.26	0.26	—	1,205	1,205	0.05	0.04	4.59	1,223
Vendor	0.20	0.14	5.30	2.02	0.04	0.08	1.54	1.62	0.04	0.43	0.47	—	5,299	5,299	0.01	0.76	13.7	5,540
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	0.39	0.49	5.34	0.00	0.00	1.11	1.11	0.00	0.26	0.26	—	1,071	1,071	0.05	0.04	0.12	1,085
Vendor	0.19	0.13	5.58	2.08	0.04	0.08	1.54	1.62	0.04	0.43	0.47	—	5,305	5,305	0.01	0.76	0.35	5,533
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	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	0.19	0.17	0.21	2.37	0.00	0.00	0.43	0.43	0.00	0.10	0.10	—	435	435	0.02	0.02	0.78	441
Vendor	0.08	0.05	2.20	0.81	0.02	0.03	0.60	0.64	0.02	0.17	0.18	—	2,092	2,092	< 0.005	0.30	2.33	2,183
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	0.03	0.03	0.04	0.43	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	72.0	72.0	< 0.005	< 0.005	0.13	73.0
Vendor	0.01	0.01	0.40	0.15	< 0.005	0.01	0.11	0.12	< 0.005	0.03	0.03	—	346	346	< 0.005	0.05	0.39	361
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.6. Grading (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	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	3.74	3.74	22.8	202	0.36	0.74	—	0.74	0.74	—	0.74	—	39,085	39,085	1.59	0.32	—	39,219
Dust From Material Movement	—	—	—	—	—	—	10.8	10.8	—	3.24	3.24	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	3.74	3.74	22.8	202	0.36	0.74	—	0.74	0.74	—	0.74	—	39,085	39,085	1.59	0.32	—	39,219
Dust From Material Movement	—	—	—	—	—	—	10.8	10.8	—	3.24	3.24	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	8.98	79.5	0.14	0.29	—	0.29	0.29	—	0.29	—	15,420	15,420	0.63	0.13	—	15,473
Dust From Material Movement	—	—	—	—	—	—	4.25	4.25	—	1.28	1.28	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	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	1.64	14.5	0.03	0.05	—	0.05	0.05	—	0.05	—	2,553	2,553	0.10	0.02	—	2,562
Dust From Material Movement	—	—	—	—	—	—	0.77	0.77	—	0.23	0.23	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	0.47	0.45	7.91	0.00	0.00	1.11	1.11	0.00	0.26	0.26	—	1,205	1,205	0.05	0.04	4.59	1,223
Vendor	0.20	0.14	5.30	2.02	0.04	0.08	1.54	1.62	0.04	0.43	0.47	—	5,299	5,299	0.01	0.76	13.7	5,540
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	0.39	0.49	5.34	0.00	0.00	1.11	1.11	0.00	0.26	0.26	—	1,071	1,071	0.05	0.04	0.12	1,085
Vendor	0.19	0.13	5.58	2.08	0.04	0.08	1.54	1.62	0.04	0.43	0.47	—	5,305	5,305	0.01	0.76	0.35	5,533
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	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	0.19	0.17	0.21	2.37	0.00	0.00	0.43	0.43	0.00	0.10	0.10	—	435	435	0.02	0.02	0.78	441
Vendor	0.08	0.05	2.20	0.81	0.02	0.03	0.60	0.64	0.02	0.17	0.18	—	2,092	2,092	< 0.005	0.30	2.33	2,183
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	0.03	0.03	0.04	0.43	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	72.0	72.0	< 0.005	< 0.005	0.13	73.0

Vendor	0.01	0.01	0.40	0.15	< 0.005	0.01	0.11	0.12	< 0.005	0.03	0.03	—	346	346	< 0.005	0.05	0.39	361
Hauling	0.00	0.00	0.00	0.00	0.00	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. 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.64	3.05	28.2	34.3	0.07	1.10	—	1.10	1.01	—	1.01	—	7,240	7,240	0.29	0.06	—	7,265
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	0.08	0.07	0.61	0.74	< 0.005	0.02	—	0.02	0.02	—	0.02	—	156	156	0.01	< 0.005	—	156
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	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	0.11	0.13	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	25.8	25.8	< 0.005	< 0.005	—	25.9
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	26.2	21.8	27.3	300	0.00	0.00	62.4	62.4	0.00	14.6	14.6	—	60,204	60,204	3.00	2.37	6.69	60,992
Vendor	1.62	1.10	48.0	17.9	0.38	0.70	13.3	13.9	0.35	3.66	4.01	—	45,651	45,651	0.07	6.58	3.05	47,615
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	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	0.57	0.52	0.63	7.25	0.00	0.00	1.33	1.33	0.00	0.31	0.31	—	1,333	1,333	0.06	0.05	2.40	1,352
Vendor	0.04	0.03	1.04	0.38	0.01	0.01	0.28	0.30	0.01	0.08	0.09	—	982	982	< 0.005	0.14	1.09	1,025
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	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	0.12	1.32	0.00	0.00	0.24	0.24	0.00	0.06	0.06	—	221	221	0.01	0.01	0.40	224
Vendor	0.01	< 0.005	0.19	0.07	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	163	163	< 0.005	0.02	0.18	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

3.8. Building Construction (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	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 Equipm	0.93	0.89	6.85	42.2	0.07	0.20	—	0.20	0.19	—	0.19	—	7,240	7,240	0.29	0.06	—	7,265
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	0.02	0.02	0.15	0.91	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	156	156	0.01	< 0.005	—	156
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	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	0.03	0.17	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	25.8	25.8	< 0.005	< 0.005	—	25.9
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	26.2	21.8	27.3	300	0.00	0.00	62.4	62.4	0.00	14.6	14.6	—	60,204	60,204	3.00	2.37	6.69	60,992
Vendor	1.62	1.10	48.0	17.9	0.38	0.70	13.3	13.9	0.35	3.66	4.01	—	45,651	45,651	0.07	6.58	3.05	47,615
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	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	0.57	0.52	0.63	7.25	0.00	0.00	1.33	1.33	0.00	0.31	0.31	—	1,333	1,333	0.06	0.05	2.40	1,352
Vendor	0.04	0.03	1.04	0.38	0.01	0.01	0.28	0.30	0.01	0.08	0.09	—	982	982	< 0.005	0.14	1.09	1,025
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	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	0.12	1.32	0.00	0.00	0.24	0.24	0.00	0.06	0.06	—	221	221	0.01	0.01	0.40	224
Vendor	0.01	< 0.005	0.19	0.07	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	163	163	< 0.005	0.02	0.18	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

3.9. 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	3.53	2.95	26.9	34.2	0.07	1.00	—	1.00	0.92	—	0.92	—	7,240	7,240	0.29	0.06	—	7,264
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	3.53	2.95	26.9	34.2	0.07	1.00	—	1.00	0.92	—	0.92	—	7,240	7,240	0.29	0.06	—	7,264
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	2.52	2.11	19.2	24.4	0.05	0.71	—	0.71	0.66	—	0.66	—	5,171	5,171	0.21	0.04	—	5,189

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	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	0.46	0.39	3.51	4.46	0.01	0.13	—	0.13	0.12	—	0.12	—	856	856	0.03	0.01	—	859
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	27.7	25.4	23.0	421	0.00	0.00	62.4	62.4	0.00	14.6	14.6	—	66,745	66,745	2.79	2.37	238	67,759
Vendor	1.69	1.20	44.1	16.6	0.35	0.35	13.3	13.6	0.35	3.66	4.01	—	44,674	44,674	0.07	6.54	103	46,728
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	23.6	21.2	25.1	284	0.00	0.00	62.4	62.4	0.00	14.6	14.6	—	59,346	59,346	3.00	2.37	6.16	60,133
Vendor	1.58	1.10	46.5	17.1	0.38	0.35	13.3	13.6	0.35	3.66	4.01	—	44,723	44,723	0.07	6.54	2.66	46,677
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	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	17.0	15.2	19.4	227	0.00	0.00	44.2	44.2	0.00	10.4	10.4	—	43,607	43,607	2.14	1.69	73.2	44,238
Vendor	1.18	0.83	33.0	12.0	0.25	0.25	9.40	9.65	0.25	2.60	2.85	—	31,925	31,925	0.05	4.67	31.7	33,350
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.10	2.77	3.54	41.5	0.00	0.00	8.07	8.07	0.00	1.89	1.89	—	7,220	7,220	0.35	0.28	12.1	7,324
Vendor	0.22	0.15	6.02	2.20	0.05	0.05	1.72	1.76	0.05	0.47	0.52	—	5,286	5,286	0.01	0.77	5.24	5,522
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.10. Building Construction (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	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	0.93	0.89	6.84	42.1	0.07	0.20	—	0.20	0.19	—	0.19	—	7,240	7,240	0.29	0.06	—	7,264
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	0.93	0.89	6.84	42.1	0.07	0.20	—	0.20	0.19	—	0.19	—	7,240	7,240	0.29	0.06	—	7,264
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	0.63	4.89	30.1	0.05	0.14	—	0.14	0.14	—	0.14	—	5,171	5,171	0.21	0.04	—	5,189
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	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	0.89	5.49	0.01	0.03	—	0.03	0.02	—	0.02	—	856	856	0.03	0.01	—	859

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	27.7	25.4	23.0	421	0.00	0.00	62.4	62.4	0.00	14.6	14.6	—	66,745	66,745	2.79	2.37	238	67,759
Vendor	1.69	1.20	44.1	16.6	0.35	0.35	13.3	13.6	0.35	3.66	4.01	—	44,674	44,674	0.07	6.54	103	46,728
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	23.6	21.2	25.1	284	0.00	0.00	62.4	62.4	0.00	14.6	14.6	—	59,346	59,346	3.00	2.37	6.16	60,133
Vendor	1.58	1.10	46.5	17.1	0.38	0.35	13.3	13.6	0.35	3.66	4.01	—	44,723	44,723	0.07	6.54	2.66	46,677
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	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	17.0	15.2	19.4	227	0.00	0.00	44.2	44.2	0.00	10.4	10.4	—	43,607	43,607	2.14	1.69	73.2	44,238
Vendor	1.18	0.83	33.0	12.0	0.25	0.25	9.40	9.65	0.25	2.60	2.85	—	31,925	31,925	0.05	4.67	31.7	33,350
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.10	2.77	3.54	41.5	0.00	0.00	8.07	8.07	0.00	1.89	1.89	—	7,220	7,220	0.35	0.28	12.1	7,324
Vendor	0.22	0.15	6.02	2.20	0.05	0.05	1.72	1.76	0.05	0.47	0.52	—	5,286	5,286	0.01	0.77	5.24	5,522
Hauling	0.00	0.00	0.00	0.00	0.00	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. 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	3.40	2.85	25.3	34.2	0.07	0.90	—	0.90	0.83	—	0.83	—	7,242	7,242	0.29	0.06	—	7,266
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	3.40	2.85	25.3	34.2	0.07	0.90	—	0.90	0.83	—	0.83	—	7,242	7,242	0.29	0.06	—	7,266
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	2.43	2.04	18.1	24.5	0.05	0.64	—	0.64	0.59	—	0.59	—	5,187	5,187	0.21	0.04	—	5,205
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	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	0.44	0.37	3.31	4.47	0.01	0.12	—	0.12	0.11	—	0.11	—	859	859	0.03	0.01	—	862
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	25.0	22.6	20.8	395	0.00	0.00	62.4	62.4	0.00	14.6	14.6	—	65,552	65,552	2.79	2.37	218	66,546
Vendor	1.69	1.20	42.5	16.2	0.35	0.35	13.3	13.6	0.35	3.66	4.01	—	43,580	43,580	0.07	6.19	90.7	45,518
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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	22.9	20.4	23.0	267	0.00	0.00	62.4	62.4	0.00	14.6	14.6	—	58,299	58,299	2.90	2.37	5.66	59,083
Vendor	1.58	1.10	44.5	16.3	0.35	0.35	13.3	13.6	0.35	3.66	4.01	—	43,628	43,628	0.07	6.19	2.35	45,478
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	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	16.6	14.8	17.9	213	0.00	0.00	44.3	44.3	0.00	10.4	10.4	—	42,953	42,953	2.07	1.70	67.4	43,578
Vendor	1.18	0.84	32.0	11.5	0.25	0.25	9.43	9.68	0.25	2.61	2.86	—	31,228	31,228	0.05	4.44	28.0	32,580
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.02	2.70	3.27	38.9	0.00	0.00	8.09	8.09	0.00	1.90	1.90	—	7,111	7,111	0.34	0.28	11.2	7,215
Vendor	0.22	0.15	5.84	2.10	0.05	0.05	1.72	1.77	0.05	0.48	0.52	—	5,170	5,170	0.01	0.73	4.63	5,394
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.12. Building Construction (2028) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	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	0.93	0.89	6.83	42.1	0.07	0.19	—	0.19	0.19	—	0.19	—	7,242	7,242	0.29	0.06	—	7,266

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	0.93	0.89	6.83	42.1	0.07	0.19	—	0.19	0.19	—	0.19	—	7,242	7,242	0.29	0.06	—	7,266
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	0.67	0.64	4.89	30.2	0.05	0.14	—	0.14	0.14	—	0.14	—	5,187	5,187	0.21	0.04	—	5,205
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	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	0.89	5.51	0.01	0.03	—	0.03	0.02	—	0.02	—	859	859	0.03	0.01	—	862
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	25.0	22.6	20.8	395	0.00	0.00	62.4	62.4	0.00	14.6	14.6	—	65,552	65,552	2.79	2.37	218	66,546
Vendor	1.69	1.20	42.5	16.2	0.35	0.35	13.3	13.6	0.35	3.66	4.01	—	43,580	43,580	0.07	6.19	90.7	45,518
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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	22.9	20.4	23.0	267	0.00	0.00	62.4	62.4	0.00	14.6	14.6	—	58,299	58,299	2.90	2.37	5.66	59,083
Vendor	1.58	1.10	44.5	16.3	0.35	0.35	13.3	13.6	0.35	3.66	4.01	—	43,628	43,628	0.07	6.19	2.35	45,478
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	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	16.6	14.8	17.9	213	0.00	0.00	44.3	44.3	0.00	10.4	10.4	—	42,953	42,953	2.07	1.70	67.4	43,578
Vendor	1.18	0.84	32.0	11.5	0.25	0.25	9.43	9.68	0.25	2.61	2.86	—	31,228	31,228	0.05	4.44	28.0	32,580
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.02	2.70	3.27	38.9	0.00	0.00	8.09	8.09	0.00	1.90	1.90	—	7,111	7,111	0.34	0.28	11.2	7,215
Vendor	0.22	0.15	5.84	2.10	0.05	0.05	1.72	1.77	0.05	0.48	0.52	—	5,170	5,170	0.01	0.73	4.63	5,394
Hauling	0.00	0.00	0.00	0.00	0.00	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. 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	3.30	2.77	24.1	34.0	0.07	0.83	—	0.83	0.77	—	0.77	—	7,240	7,240	0.29	0.06	—	7,264
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	3.30	2.77	24.1	34.0	0.07	0.83	—	0.83	0.77	—	0.77	—	7,240	7,240	0.29	0.06	—	7,264
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	2.36	1.98	17.2	24.3	0.05	0.59	—	0.59	0.55	—	0.55	—	5,171	5,171	0.21	0.04	—	5,189
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	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	0.43	0.36	3.15	4.44	0.01	0.11	—	0.11	0.10	—	0.10	—	856	856	0.03	0.01	—	859
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	24.0	21.7	18.7	370	0.00	0.00	62.4	62.4	0.00	14.6	14.6	—	64,412	64,412	2.69	2.37	199	65,384
Vendor	1.34	1.20	40.9	15.4	0.35	0.35	13.3	13.6	0.35	3.66	4.01	—	42,409	42,409	0.07	6.19	79.7	44,336
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	22.0	19.7	20.9	249	0.00	0.00	62.4	62.4	0.00	14.6	14.6	—	57,298	57,298	0.95	2.37	5.15	58,033
Vendor	1.24	1.10	42.9	15.9	0.35	0.35	13.3	13.6	0.35	3.66	4.01	—	42,458	42,458	0.07	6.19	2.07	44,307
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	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	14.1	16.3	200	0.00	0.00	44.2	44.2	0.00	10.4	10.4	—	42,098	42,098	0.68	1.69	61.5	42,681
Vendor	0.93	0.83	30.5	11.2	0.25	0.25	9.40	9.65	0.25	2.60	2.85	—	30,307	30,307	0.05	4.42	24.6	31,651
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	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	2.57	2.98	36.4	0.00	0.00	8.07	8.07	0.00	1.89	1.89	—	6,970	6,970	0.11	0.28	10.2	7,066
Vendor	0.17	0.15	5.56	2.04	0.05	0.05	1.72	1.76	0.05	0.47	0.52	—	5,018	5,018	0.01	0.73	4.07	5,240
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.14. Building Construction (2029) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	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	0.93	0.89	6.83	42.1	0.07	0.19	—	0.19	0.19	—	0.19	—	7,240	7,240	0.29	0.06	—	7,264
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	0.93	0.89	6.83	42.1	0.07	0.19	—	0.19	0.19	—	0.19	—	7,240	7,240	0.29	0.06	—	7,264
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	0.63	4.88	30.1	0.05	0.14	—	0.14	0.14	—	0.14	—	5,171	5,171	0.21	0.04	—	5,189
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	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	0.89	5.49	0.01	0.03	—	0.03	0.02	—	0.02	—	856	856	0.03	0.01	—	859
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	24.0	21.7	18.7	370	0.00	0.00	62.4	62.4	0.00	14.6	14.6	—	64,412	64,412	2.69	2.37	199	65,384
Vendor	1.34	1.20	40.9	15.4	0.35	0.35	13.3	13.6	0.35	3.66	4.01	—	42,409	42,409	0.07	6.19	79.7	44,336
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	22.0	19.7	20.9	249	0.00	0.00	62.4	62.4	0.00	14.6	14.6	—	57,298	57,298	0.95	2.37	5.15	58,033
Vendor	1.24	1.10	42.9	15.9	0.35	0.35	13.3	13.6	0.35	3.66	4.01	—	42,458	42,458	0.07	6.19	2.07	44,307
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	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	14.1	16.3	200	0.00	0.00	44.2	44.2	0.00	10.4	10.4	—	42,098	42,098	0.68	1.69	61.5	42,681
Vendor	0.93	0.83	30.5	11.2	0.25	0.25	9.40	9.65	0.25	2.60	2.85	—	30,307	30,307	0.05	4.42	24.6	31,651
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	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	2.57	2.98	36.4	0.00	0.00	8.07	8.07	0.00	1.89	1.89	—	6,970	6,970	0.11	0.28	10.2	7,066
Vendor	0.17	0.15	5.56	2.04	0.05	0.05	1.72	1.76	0.05	0.47	0.52	—	5,018	5,018	0.01	0.73	4.07	5,240
Hauling	0.00	0.00	0.00	0.00	0.00	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. 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	3.22	2.70	23.5	34.0	0.07	0.79	—	0.79	0.73	—	0.73	—	7,240	7,240	0.29	0.06	—	7,264
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	3.22	2.70	23.5	34.0	0.07	0.79	—	0.79	0.73	—	0.73	—	7,240	7,240	0.29	0.06	—	7,264
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	2.30	1.93	16.8	24.3	0.05	0.57	—	0.57	0.52	—	0.52	—	5,171	5,171	0.21	0.04	—	5,189
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	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	0.42	0.35	3.07	4.43	0.01	0.10	—	0.10	0.10	—	0.10	—	856	856	0.03	0.01	—	859
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	23.0	20.7	16.6	346	0.00	0.00	62.4	62.4	0.00	14.6	14.6	—	63,321	63,321	0.74	2.26	181	64,195
Vendor	1.34	1.20	39.3	15.0	0.35	0.35	13.3	13.6	0.35	3.66	4.01	—	41,178	41,178	0.07	5.85	70.2	42,992
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	21.3	19.0	18.7	235	0.00	0.00	62.4	62.4	0.00	14.6	14.6	—	56,343	56,343	0.84	2.37	4.68	57,074
Vendor	1.24	1.10	41.7	15.5	0.35	0.35	13.3	13.6	0.35	3.66	4.01	—	41,227	41,227	0.07	5.85	1.82	42,972
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	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	13.6	14.9	187	0.00	0.00	44.2	44.2	0.00	10.4	10.4	—	41,393	41,393	0.60	1.69	55.7	41,968
Vendor	0.93	0.83	29.6	10.9	0.25	0.25	9.40	9.65	0.25	2.60	2.85	—	29,427	29,427	0.05	4.18	21.6	30,695
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	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	2.48	2.71	34.1	0.00	0.00	8.07	8.07	0.00	1.89	1.89	—	6,853	6,853	0.10	0.28	9.23	6,948
Vendor	0.17	0.15	5.40	1.99	0.05	0.05	1.72	1.76	0.05	0.47	0.52	—	4,872	4,872	0.01	0.69	3.58	5,082
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.16. Building Construction (2030) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	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	0.93	0.89	6.83	42.1	0.07	0.19	—	0.19	0.19	—	0.19	—	7,240	7,240	0.29	0.06	—	7,264
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	0.93	0.89	6.83	42.1	0.07	0.19	—	0.19	0.19	—	0.19	—	7,240	7,240	0.29	0.06	—	7,264
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	0.63	4.88	30.1	0.05	0.14	—	0.14	0.13	—	0.13	—	5,171	5,171	0.21	0.04	—	5,189
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	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	0.89	5.49	0.01	0.03	—	0.03	0.02	—	0.02	—	856	856	0.03	0.01	—	859
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	23.0	20.7	16.6	346	0.00	0.00	62.4	62.4	0.00	14.6	14.6	—	63,321	63,321	0.74	2.26	181	64,195
Vendor	1.34	1.20	39.3	15.0	0.35	0.35	13.3	13.6	0.35	3.66	4.01	—	41,178	41,178	0.07	5.85	70.2	42,992
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	21.3	19.0	18.7	235	0.00	0.00	62.4	62.4	0.00	14.6	14.6	—	56,343	56,343	0.84	2.37	4.68	57,074
Vendor	1.24	1.10	41.7	15.5	0.35	0.35	13.3	13.6	0.35	3.66	4.01	—	41,227	41,227	0.07	5.85	1.82	42,972
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	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	13.6	14.9	187	0.00	0.00	44.2	44.2	0.00	10.4	10.4	—	41,393	41,393	0.60	1.69	55.7	41,968
Vendor	0.93	0.83	29.6	10.9	0.25	0.25	9.40	9.65	0.25	2.60	2.85	—	29,427	29,427	0.05	4.18	21.6	30,695
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	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	2.48	2.71	34.1	0.00	0.00	8.07	8.07	0.00	1.89	1.89	—	6,853	6,853	0.10	0.28	9.23	6,948
Vendor	0.17	0.15	5.40	1.99	0.05	0.05	1.72	1.76	0.05	0.47	0.52	—	4,872	4,872	0.01	0.69	3.58	5,082
Hauling	0.00	0.00	0.00	0.00	0.00	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. 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	3.15	2.64	22.6	33.8	0.07	0.75	—	0.75	0.69	—	0.69	—	7,240	7,240	0.29	0.06	—	7,264
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	3.15	2.64	22.6	33.8	0.07	0.75	—	0.75	0.69	—	0.69	—	7,240	7,240	0.29	0.06	—	7,264
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	1.62	1.35	11.6	17.3	0.04	0.38	—	0.38	0.35	—	0.35	—	3,712	3,712	0.15	0.03	—	3,725
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	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	0.29	0.25	2.11	3.17	0.01	0.07	—	0.07	0.06	—	0.06	—	615	615	0.02	< 0.005	—	617
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	20.3	20.0	16.5	325	0.00	0.00	62.4	62.4	0.00	14.6	14.6	—	62,297	62,297	0.63	2.26	163	63,150
Vendor	1.34	1.20	38.0	14.7	0.35	0.35	13.3	13.6	0.35	3.66	4.01	—	39,885	39,885	0.07	5.85	61.3	41,690
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	18.6	18.2	16.7	219	0.00	0.00	62.4	62.4	0.00	14.6	14.6	—	55,444	55,444	0.84	2.26	4.23	56,144
Vendor	1.24	1.10	40.1	15.1	0.35	0.35	13.3	13.6	0.35	3.66	4.01	—	39,933	39,933	0.07	5.85	1.58	41,679
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	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	9.61	9.40	9.56	126	0.00	0.00	31.7	31.7	0.00	7.44	7.44	—	29,237	29,237	0.43	1.21	36.1	29,646
Vendor	0.67	0.60	20.4	7.65	0.18	0.18	6.75	6.93	0.18	1.87	2.04	—	20,460	20,460	0.04	3.00	13.5	21,368
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.75	1.71	1.74	22.9	0.00	0.00	5.79	5.79	0.00	1.36	1.36	—	4,840	4,840	0.07	0.20	5.98	4,908
Vendor	0.12	0.11	3.73	1.40	0.03	0.03	1.23	1.26	0.03	0.34	0.37	—	3,387	3,387	0.01	0.50	2.24	3,538
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.18. Building Construction (2031) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	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	0.93	0.89	6.82	42.1	0.07	0.19	—	0.19	0.19	—	0.19	—	7,240	7,240	0.29	0.06	—	7,264
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	0.93	0.89	6.82	42.1	0.07	0.19	—	0.19	0.19	—	0.19	—	7,240	7,240	0.29	0.06	—	7,264
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	0.48	0.45	3.50	21.6	0.04	0.10	—	0.10	0.10	—	0.10	—	3,712	3,712	0.15	0.03	—	3,725
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	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	0.09	0.08	0.64	3.94	0.01	0.02	—	0.02	0.02	—	0.02	—	615	615	0.02	< 0.005	—	617
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	20.3	20.0	16.5	325	0.00	0.00	62.4	62.4	0.00	14.6	14.6	—	62,297	62,297	0.63	2.26	163	63,150
Vendor	1.34	1.20	38.0	14.7	0.35	0.35	13.3	13.6	0.35	3.66	4.01	—	39,885	39,885	0.07	5.85	61.3	41,690
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	18.6	18.2	16.7	219	0.00	0.00	62.4	62.4	0.00	14.6	14.6	—	55,444	55,444	0.84	2.26	4.23	56,144
Vendor	1.24	1.10	40.1	15.1	0.35	0.35	13.3	13.6	0.35	3.66	4.01	—	39,933	39,933	0.07	5.85	1.58	41,679
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	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	9.61	9.40	9.56	126	0.00	0.00	31.7	31.7	0.00	7.44	7.44	—	29,237	29,237	0.43	1.21	36.1	29,646
Vendor	0.67	0.60	20.4	7.65	0.18	0.18	6.75	6.93	0.18	1.87	2.04	—	20,460	20,460	0.04	3.00	13.5	21,368
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.75	1.71	1.74	22.9	0.00	0.00	5.79	5.79	0.00	1.36	1.36	—	4,840	4,840	0.07	0.20	5.98	4,908
Vendor	0.12	0.11	3.73	1.40	0.03	0.03	1.23	1.26	0.03	0.34	0.37	—	3,387	3,387	0.01	0.50	2.24	3,538
Hauling	0.00	0.00	0.00	0.00	0.00	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. 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	1.53	1.29	12.6	19.8	0.03	0.44	—	0.44	0.41	—	0.41	—	3,021	3,021	0.12	0.02	—	3,032
Paving	2.81	2.81	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	1.53	1.29	12.6	19.8	0.03	0.44	—	0.44	0.41	—	0.41	—	3,021	3,021	0.12	0.02	—	3,032
Paving	2.81	2.81	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	0.92	0.77	7.50	11.8	0.02	0.26	—	0.26	0.24	—	0.24	—	1,803	1,803	0.07	0.01	—	1,809
Paving	1.67	1.67	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	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	0.17	0.14	1.37	2.16	< 0.005	0.05	—	0.05	0.04	—	0.04	—	299	299	0.01	< 0.005	—	300
Paving	0.31	0.31	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	2.17	0.00	0.00	0.39	0.39	0.00	0.09	0.09	—	398	398	< 0.005	0.01	1.14	403
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	0.12	1.47	0.00	0.00	0.39	0.39	0.00	0.09	0.09	—	354	354	0.01	0.01	0.03	358
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	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	0.08	0.98	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	217	217	< 0.005	0.01	0.29	220
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	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	0.04	0.04	0.00	0.01	0.01	—	36.0	36.0	< 0.005	< 0.005	0.05	36.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.20. Paving (2030) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	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	0.32	0.32	3.87	21.2	0.03	0.06	—	0.06	0.06	—	0.06	—	3,021	3,021	0.12	0.02	—	3,032
Paving	2.81	2.81	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	0.32	0.32	3.87	21.2	0.03	0.06	—	0.06	0.06	—	0.06	—	3,021	3,021	0.12	0.02	—	3,032
Paving	2.81	2.81	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.19	0.19	2.31	12.7	0.02	0.03	—	0.03	0.03	—	0.03	—	1,803	1,803	0.07	0.01	—	1,809
Paving	1.67	1.67	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	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	0.42	2.31	< 0.005	0.01	—	0.01	0.01	—	0.01	—	299	299	0.01	< 0.005	—	300
Paving	0.31	0.31	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	2.17	0.00	0.00	0.39	0.39	0.00	0.09	0.09	—	398	398	< 0.005	0.01	1.14	403
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	0.12	1.47	0.00	0.00	0.39	0.39	0.00	0.09	0.09	—	354	354	0.01	0.01	0.03	358
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	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	0.08	0.98	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	217	217	< 0.005	0.01	0.29	220
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	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	0.04	0.04	0.00	0.01	0.01	—	36.0	36.0	< 0.005	< 0.005	0.05	36.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	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. 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	1.49	1.26	12.3	19.8	0.03	0.42	—	0.42	0.39	—	0.39	—	3,021	3,021	0.12	0.02	—	3,032
Paving	2.81	2.81	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	1.26	12.3	19.8	0.03	0.42	—	0.42	0.39	—	0.39	—	3,021	3,021	0.12	0.02	—	3,032
Paving	2.81	2.81	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	0.77	0.64	6.28	10.1	0.01	0.22	—	0.22	0.20	—	0.20	—	1,549	1,549	0.06	0.01	—	1,554

Paving	1.44	1.44	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.14	0.12	1.15	1.85	< 0.005	0.04	—	0.04	0.04	—	0.04	—	256	256	0.01	< 0.005	—	257
Paving	0.26	0.26	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	0.10	2.04	0.00	0.00	0.39	0.39	0.00	0.09	0.09	—	391	391	< 0.005	0.01	1.03	397
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	0.11	0.10	1.37	0.00	0.00	0.39	0.39	0.00	0.09	0.09	—	348	348	0.01	0.01	0.03	353
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	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	0.06	0.06	0.79	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	184	184	< 0.005	0.01	0.23	186
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	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	0.14	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	30.4	30.4	< 0.005	< 0.005	0.04	30.8
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.22. Paving (2031) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	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	0.32	0.32	3.87	21.2	0.03	0.06	—	0.06	0.06	—	0.06	—	3,021	3,021	0.12	0.02	—	3,032
Paving	2.81	2.81	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	0.32	0.32	3.87	21.2	0.03	0.06	—	0.06	0.06	—	0.06	—	3,021	3,021	0.12	0.02	—	3,032
Paving	2.81	2.81	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	0.16	0.16	1.98	10.9	0.01	0.03	—	0.03	0.03	—	0.03	—	1,549	1,549	0.06	0.01	—	1,554
Paving	1.44	1.44	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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	0.03	0.03	0.36	1.98	< 0.005	0.01	—	0.01	0.01	—	0.01	—	256	256	0.01	< 0.005	—	257
Paving	0.26	0.26	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	0.10	2.04	0.00	0.00	0.39	0.39	0.00	0.09	0.09	—	391	391	< 0.005	0.01	1.03	397
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	0.11	0.10	1.37	0.00	0.00	0.39	0.39	0.00	0.09	0.09	—	348	348	0.01	0.01	0.03	353
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	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	0.06	0.06	0.79	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	184	184	< 0.005	0.01	0.23	186
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	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	0.14	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	30.4	30.4	< 0.005	< 0.005	0.04	30.8
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	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. 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	0.32	0.26	2.09	2.95	< 0.005	0.03	—	0.03	0.03	—	0.03	—	356	356	0.01	< 0.005	—	357
Architectural Coatings	143	143	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	0.32	0.26	2.09	2.95	< 0.005	0.03	—	0.03	0.03	—	0.03	—	356	356	0.01	< 0.005	—	357
Architectural Coatings	143	143	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	0.19	0.16	1.25	1.76	< 0.005	0.02	—	0.02	0.02	—	0.02	—	213	213	0.01	< 0.005	—	213

Architect Coatings	85.5	85.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.03	0.03	0.23	0.32	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	35.2	35.2	< 0.005	< 0.005	—	35.3
Architectural Coatings	15.6	15.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	4.60	4.15	3.32	69.2	0.00	0.00	12.5	12.5	0.00	2.93	2.93	—	12,664	12,664	0.15	0.45	36.2	12,839
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.27	3.79	3.75	46.9	0.00	0.00	12.5	12.5	0.00	2.93	2.93	—	11,269	11,269	0.17	0.47	0.94	11,415
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	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	2.55	2.28	2.48	31.2	0.00	0.00	7.39	7.39	0.00	1.73	1.73	—	6,918	6,918	0.10	0.28	9.31	7,014
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.46	0.42	0.45	5.70	0.00	0.00	1.35	1.35	0.00	0.32	0.32	—	1,145	1,145	0.02	0.05	1.54	1,161
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.24. Architectural Coating (2030) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	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	1.72	2.57	< 0.005	0.01	—	0.01	0.01	—	0.01	—	356	356	0.01	< 0.005	—	357
Architectural Coatings	39.0	39.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.06	0.06	1.72	2.57	< 0.005	0.01	—	0.01	0.01	—	0.01	—	356	356	0.01	< 0.005	—	357
Architectural Coatings	39.0	39.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.03	0.03	1.03	1.53	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	213	213	0.01	< 0.005	—	213
Architectural Coatings	23.3	23.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.19	0.28	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	35.2	35.2	< 0.005	< 0.005	—	35.3
Architectural Coatings	4.25	4.25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	4.60	4.15	3.32	69.2	0.00	0.00	12.5	12.5	0.00	2.93	2.93	—	12,664	12,664	0.15	0.45	36.2	12,839
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.27	3.79	3.75	46.9	0.00	0.00	12.5	12.5	0.00	2.93	2.93	—	11,269	11,269	0.17	0.47	0.94	11,415
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	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	2.55	2.28	2.48	31.2	0.00	0.00	7.39	7.39	0.00	1.73	1.73	—	6,918	6,918	0.10	0.28	9.31	7,014
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.46	0.42	0.45	5.70	0.00	0.00	1.35	1.35	0.00	0.32	0.32	—	1,145	1,145	0.02	0.05	1.54	1,161
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	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. 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	0.31	0.25	2.07	2.94	< 0.005	0.03	—	0.03	0.02	—	0.02	—	356	356	0.01	< 0.005	—	357
Architectural Coatings	143	143	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	0.31	0.25	2.07	2.94	< 0.005	0.03	—	0.03	0.02	—	0.02	—	356	356	0.01	< 0.005	—	357
Architectural Coatings	143	143	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	0.16	0.13	1.06	1.51	< 0.005	0.01	—	0.01	0.01	—	0.01	—	183	183	0.01	< 0.005	—	183
Architectural Coatings	73.4	73.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.03	0.02	0.19	0.28	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	30.2	30.2	< 0.005	< 0.005	—	30.3
Architectural Coatings	13.4	13.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.07	4.00	3.30	64.9	0.00	0.00	12.5	12.5	0.00	2.93	2.93	—	12,459	12,459	0.13	0.45	32.7	12,630

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.73	3.64	3.34	43.7	0.00	0.00	12.5	12.5	0.00	2.93	2.93	—	11,089	11,089	0.17	0.45	0.85	11,229
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	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	1.92	1.88	1.91	25.1	0.00	0.00	6.35	6.35	0.00	1.49	1.49	—	5,847	5,847	0.09	0.24	7.23	5,929
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.35	0.34	0.35	4.59	0.00	0.00	1.16	1.16	0.00	0.27	0.27	—	968	968	0.01	0.04	1.20	982
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.26. Architectural Coating (2031) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	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	1.72	2.57	< 0.005	0.01	—	0.01	0.01	—	0.01	—	356	356	0.01	< 0.005	—	357

Architectural Coatings	39.0	39.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.06	0.06	1.72	2.57	< 0.005	0.01	—	0.01	0.01	—	0.01	—	356	356	0.01	< 0.005	—	357
Architectural Coatings	39.0	39.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.03	0.03	0.88	1.32	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	183	183	0.01	< 0.005	—	183
Architectural Coatings	20.0	20.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.01	0.01	0.16	0.24	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	30.2	30.2	< 0.005	< 0.005	—	30.3

Architectural Coating	3.65	3.65	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	4.07	4.00	3.30	64.9	0.00	0.00	12.5	12.5	0.00	2.93	2.93	—	12,459	12,459	0.13	0.45	32.7	12,630
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.73	3.64	3.34	43.7	0.00	0.00	12.5	12.5	0.00	2.93	2.93	—	11,089	11,089	0.17	0.45	0.85	11,229
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	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	1.92	1.88	1.91	25.1	0.00	0.00	6.35	6.35	0.00	1.49	1.49	—	5,847	5,847	0.09	0.24	7.23	5,929
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.35	0.34	0.35	4.59	0.00	0.00	1.16	1.16	0.00	0.27	0.27	—	968	968	0.01	0.04	1.20	982
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

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	1/1/2026	3/25/2026	5.00	60.0	—
Site Preparation	Site Preparation	3/26/2026	6/1/2026	5.00	48.0	—
Grading	Grading	6/2/2026	12/18/2026	5.00	144	—
Building Construction	Building Construction	12/21/2026	9/19/2031	5.00	1,240	—
Paving	Paving	3/2/2030	9/19/2031	5.00	405	—
Architectural Coating	Architectural Coating	3/2/2030	9/19/2031	5.00	405	—

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	Average	4.00	8.00	367	0.40
Demolition	Excavators	Diesel	Average	3.00	8.00	36.0	0.38
Demolition	Concrete/Industrial Saws	Diesel	Average	2.00	8.00	33.0	0.73

Demolition	Crushing/Proc. Equipment	Gasoline	Average	1.00	8.00	12.0	0.85
Site Preparation	Rubber Tired Dozers	Diesel	Average	12.0	8.00	367	0.40
Site Preparation	Crawler Tractors	Diesel	Average	9.00	8.00	87.0	0.43
Grading	Crawler Tractors	Diesel	Average	6.00	8.00	87.0	0.43
Grading	Excavators	Diesel	Average	6.00	8.00	36.0	0.38
Grading	Graders	Diesel	Average	3.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Grading	Scrapers	Diesel	Average	16.0	8.00	423	0.48
Building Construction	Cranes	Diesel	Average	4.00	8.00	367	0.29
Building Construction	Forklifts	Diesel	Average	6.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	2.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	6.00	8.00	84.0	0.37
Building Construction	Welders	Diesel	Average	2.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Average	4.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	4.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	4.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	2.00	8.00	37.0	0.48

5.2.2. Mitigated

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	4.00	8.00	367	0.40
Demolition	Excavators	Diesel	Tier 4 Final	3.00	8.00	36.0	0.38
Demolition	Concrete/Industrial Saws	Diesel	Tier 4 Final	2.00	8.00	33.0	0.73
Demolition	Crushing/Proc. Equipment	Gasoline	Average	1.00	8.00	12.0	0.85
Site Preparation	Rubber Tired Dozers	Diesel	Tier 4 Final	12.0	8.00	367	0.40

Site Preparation	Crawler Tractors	Diesel	Tier 4 Final	9.00	8.00	87.0	0.43
Grading	Crawler Tractors	Diesel	Tier 4 Final	6.00	8.00	87.0	0.43
Grading	Excavators	Diesel	Tier 4 Final	6.00	8.00	36.0	0.38
Grading	Graders	Diesel	Tier 4 Final	3.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Tier 4 Final	3.00	8.00	367	0.40
Grading	Scrapers	Diesel	Tier 4 Final	16.0	8.00	423	0.48
Building Construction	Cranes	Diesel	Tier 4 Final	4.00	8.00	367	0.29
Building Construction	Forklifts	Diesel	Tier 4 Final	6.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	2.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	6.00	8.00	84.0	0.37
Building Construction	Welders	Diesel	Tier 4 Final	2.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Tier 4 Final	4.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Tier 4 Final	4.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Tier 4 Final	4.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Tier 4 Final	2.00	8.00	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	25.0	18.5	LDA,LDT1,LDT2
Demolition	Vendor	75.0	10.2	HHDT,MHDT
Demolition	Hauling	2.05	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	52.5	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	60.0	10.2	HHDT,MHDT

Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	85.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	180	10.2	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	4,777	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	1,549	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	30.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	0.00	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	955	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	0.00	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	25.0	18.5	LDA,LDT1,LDT2
Demolition	Vendor	75.0	10.2	HHDT,MHDT

Demolition	Hauling	2.05	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	52.5	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	60.0	10.2	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	85.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	180	10.2	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	4,777	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	1,549	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	30.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	0.00	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	955	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	0.00	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

Non-applicable. No control strategies activated by user.

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	17,060,606	5,686,869	1,133,466

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	10,690	—
Site Preparation	—	—	504	0.00	—
Grading	—	—	3,168	0.00	—
Paving	0.00	0.00	0.00	0.00	434

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
Unrefrigerated Warehouse-No Rail	0.00	0%

Refrigerated Warehouse-No Rail	0.00	0%
Parking Lot	342	100%
Other Asphalt Surfaces	91.6	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2026	0.00	532	0.03	< 0.005
2027	0.00	532	0.03	< 0.005
2028	0.00	532	0.03	< 0.005
2029	0.00	532	0.03	< 0.005
2030	0.00	532	0.03	< 0.005
2031	0.00	532	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

5.18.1.2. Mitigated

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

5.18.1.2. Mitigated

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)

5.18.2.2. Mitigated

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	36.0	annual days of extreme heat
Extreme Precipitation	1.45	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	1.70	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	5	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	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	0	0	0	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	5	1	1	4
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
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	1	1	1	2

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	88.7
AQ-PM	5.81
AQ-DPM	4.06
Drinking Water	85.4
Lead Risk Housing	21.0
Pesticides	38.2
Toxic Releases	69.3
Traffic	8.11
Effect Indicators	—
CleanUp Sites	78.1
Groundwater	2.11
Haz Waste Facilities/Generators	88.6
Impaired Water Bodies	0.00
Solid Waste	75.7
Sensitive Population	—
Asthma	74.6

Cardio-vascular	53.5
Low Birth Weights	13.2
Socioeconomic Factor Indicators	—
Education	42.3
Housing	38.1
Linguistic	32.0
Poverty	61.8
Unemployment	26.9

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	67.56063134
Employed	13.29398178
Median HI	45.83600667
Education	—
Bachelor's or higher	38.31643783
High school enrollment	100
Preschool enrollment	48.45374054
Transportation	—
Auto Access	66.18760426
Active commuting	14.50019248
Social	—
2-parent households	65.622995
Voting	65.36635442
Neighborhood	—
Alcohol availability	88.70781471

Park access	23.43128449
Retail density	4.080585141
Supermarket access	30.32208392
Tree canopy	85.67945592
Housing	—
Homeownership	75.37533684
Housing habitability	76.05543436
Low-inc homeowner severe housing cost burden	38.73989478
Low-inc renter severe housing cost burden	63.54420634
Uncrowded housing	83.16437829
Health Outcomes	—
Insured adults	61.15744899
Arthritis	73.2
Asthma ER Admissions	41.1
High Blood Pressure	77.3
Cancer (excluding skin)	55.0
Asthma	43.1
Coronary Heart Disease	72.1
Chronic Obstructive Pulmonary Disease	62.6
Diagnosed Diabetes	68.9
Life Expectancy at Birth	4.1
Cognitively Disabled	94.6
Physically Disabled	49.3
Heart Attack ER Admissions	35.9
Mental Health Not Good	46.4
Chronic Kidney Disease	79.8
Obesity	42.9
Pedestrian Injuries	90.4

Physical Health Not Good	57.2
Stroke	70.4
Health Risk Behaviors	—
Binge Drinking	11.9
Current Smoker	43.1
No Leisure Time for Physical Activity	66.6
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	88.7
Elderly	25.8
English Speaking	89.3
Foreign-born	8.1
Outdoor Workers	46.5
Climate Change Adaptive Capacity	—
Impervious Surface Cover	93.4
Traffic Density	4.7
Traffic Access	23.0
Other Indices	—
Hardship	48.4
Other Decision Support	—
2016 Voting	51.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	46.0
Healthy Places Index Score for Project Location (b)	49.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No

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	Construction schedule based on information provided by the Project applicant.
Construction: Off-Road Equipment	Construction equipment based on data provided by the Project applicant.
Construction: Trips and VMT	CalEEMod only assumes vendor trips during the building construction phase. The CalEEMod default vendor trips were allocated to each phase based on the number of days of construction for each phase.
Construction: Architectural Coatings	Rule 1113

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APPENDIX 4.2:

CALEEMOD PAS 2, 4, 6 (EAST HALF), 7 & 8 OPERATIONAL EMISSIONS MODEL OUTPUTS - 2031

16126 AVCC Ops Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	16126 AVCC Ops
Operational Year	2031
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	5.00
Precipitation (days)	13.0
Location	34.77190866778564, -118.15416969812995
County	Los Angeles-Mojave Desert
City	Unincorporated
Air District	Antelope Valley AQMD
Air Basin	Mojave Desert
TAZ	3673
EDFZ	7
Electric Utility	Southern California Edison
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	10,367	1000sqft	238	10,366,506	4,326,205	—	—	—

Refrigerated Warehouse-No Rail	1,007	1000sqft	23.1	1,007,195	0.00	—	—	—
Parking Lot	342	Acre	342	0.00	0.00	—	—	—
User Defined Industrial	11,374	User Defined Unit	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.	436	423	409	985	4.53	9.00	217	226	8.51	57.0	65.5	10,802	542,474	553,276	1,106	73.9	2,080	605,042
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	343	337	426	426	4.43	8.13	217	225	7.85	57.0	64.8	10,802	533,916	544,718	1,106	74.1	1,054	595,519
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	356	349	293	551	3.23	5.20	157	163	4.89	41.4	46.3	10,802	407,073	417,875	1,105	57.8	1,359	464,088
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	65.1	63.7	53.5	100	0.59	0.95	28.7	29.7	0.89	7.55	8.45	1,788	67,396	69,184	183	9.57	225	76,835

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	69.3	64.4	368	456	4.43	6.15	217	223	5.87	57.0	62.9	—	464,614	464,614	4.49	60.5	1,053	483,814
Area	352	345	4.16	495	0.03	0.88	—	0.88	0.66	—	0.66	—	2,034	2,034	0.09	0.02	—	2,041
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	57,909	57,909	7.33	0.89	—	58,357
Water	—	—	—	—	—	—	—	—	—	—	—	5,040	11,033	16,073	518	12.4	—	32,737
Waste	—	—	—	—	—	—	—	—	—	—	—	5,762	0.00	5,762	576	0.00	—	20,159
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,027	1,027
Stationary	14.8	13.5	37.6	34.3	0.06	1.98	0.00	1.98	1.98	0.00	1.98	0.00	6,884	6,884	0.28	0.05	0.00	6,907
Total	436	423	409	985	4.53	9.00	217	226	8.51	57.0	65.5	10,802	542,474	553,276	1,106	73.9	2,080	605,042
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	64.3	59.4	388	392	4.37	6.15	217	223	5.87	57.0	62.9	—	458,091	458,091	4.79	60.7	27.3	476,333
Area	264	264	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	57,909	57,909	7.33	0.89	—	58,357
Water	—	—	—	—	—	—	—	—	—	—	—	5,040	11,033	16,073	518	12.4	—	32,737
Waste	—	—	—	—	—	—	—	—	—	—	—	5,762	0.00	5,762	576	0.00	—	20,159
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,027	1,027
Stationary	14.8	13.5	37.6	34.3	0.06	1.98	0.00	1.98	1.98	0.00	1.98	0.00	6,884	6,884	0.28	0.05	0.00	6,907
Total	343	337	426	426	4.43	8.13	217	225	7.85	57.0	64.8	10,802	533,916	544,718	1,106	74.1	1,054	595,519
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	47.2	43.6	286	302	3.21	4.50	157	162	4.30	41.4	45.7	—	336,185	336,185	3.54	44.5	333	349,855
Area	307	304	2.05	244	0.01	0.43	—	0.43	0.33	—	0.33	—	1,003	1,003	0.04	0.01	—	1,007
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	57,909	57,909	7.33	0.89	—	58,357
Water	—	—	—	—	—	—	—	—	—	—	—	5,040	11,033	16,073	518	12.4	—	32,737

Waste	—	—	—	—	—	—	—	—	—	—	—	5,762	0.00	5,762	576	0.00	—	20,159
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,027	1,027
Stationary	2.03	1.84	5.15	4.70	0.01	0.27	0.00	0.27	0.27	0.00	0.27	0.00	943	943	0.04	0.01	0.00	946
Total	356	349	293	551	3.23	5.20	157	163	4.89	41.4	46.3	10,802	407,073	417,875	1,105	57.8	1,359	464,088
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	8.62	7.95	52.2	55.1	0.59	0.82	28.7	29.5	0.78	7.55	8.34	—	55,659	55,659	0.59	7.36	55.1	57,923
Area	56.1	55.5	0.37	44.5	< 0.005	0.08	—	0.08	0.06	—	0.06	—	166	166	0.01	< 0.005	—	167
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	9,587	9,587	1.21	0.15	—	9,662
Water	—	—	—	—	—	—	—	—	—	—	—	834	1,827	2,661	85.8	2.06	—	5,420
Waste	—	—	—	—	—	—	—	—	—	—	—	954	0.00	954	95.3	0.00	—	3,338
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	170	170
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	156	156	0.01	< 0.005	0.00	157
Total	65.1	63.7	53.5	100	0.59	0.95	28.7	29.7	0.89	7.55	8.45	1,788	67,396	69,184	183	9.57	225	76,835

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	52.4	49.9	16.2	328	0.58	0.24	60.7	61.0	0.22	15.3	15.6	—	58,910	58,910	2.98	1.95	141	59,706

Refriger Warehouse-No Rail	4.86	4.63	1.51	30.4	0.05	0.02	5.64	5.66	0.02	1.42	1.44	—	5,468	5,468	0.28	0.18	13.0	5,542
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
User Defined Industrial	12.0	9.90	350	97.6	3.80	5.88	150	156	5.63	40.2	45.9	—	400,236	400,236	1.23	58.4	900	418,565
Total	69.3	64.4	368	456	4.43	6.15	217	223	5.87	57.0	62.9	—	464,614	464,614	4.49	60.5	1,053	483,814
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrig erated Wareho use-No Rail	48.3	45.7	18.0	269	0.52	0.24	60.7	61.0	0.22	15.3	15.6	—	52,785	52,785	3.27	2.09	3.64	53,491
Refriger ated Wareho use-No Rail	4.49	4.24	1.67	24.9	0.05	0.02	5.64	5.66	0.02	1.42	1.44	—	4,900	4,900	0.30	0.19	0.34	4,965
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
User Defined Industrial	11.5	9.43	368	98.3	3.80	5.89	150	156	5.63	40.2	45.9	—	400,406	400,406	1.21	58.4	23.3	417,876
Total	64.3	59.4	388	392	4.37	6.15	217	223	5.87	57.0	62.9	—	458,091	458,091	4.79	60.7	27.3	476,333
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrig erated Wareho use-No Rail	6.46	6.10	2.48	38.5	0.07	0.03	8.03	8.06	0.03	2.03	2.06	—	6,557	6,557	0.40	0.26	7.34	6,651

Refrigerated Warehouse-No Rail	0.60	0.56	0.23	3.57	0.01	< 0.005	0.74	0.75	< 0.005	0.19	0.19	—	607	607	0.04	0.02	0.68	616
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
User Defined Industrial	1.57	1.29	49.5	13.0	0.51	0.79	19.9	20.7	0.75	5.34	6.09	—	48,496	48,496	0.15	7.08	47.1	50,656
Total	8.62	7.95	52.2	55.1	0.59	0.82	28.7	29.5	0.78	7.55	8.34	—	55,659	55,659	0.59	7.36	55.1	57,923

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	—	—	—	—	—	—	—	—	—	—	—	—	34,666	34,666	4.39	0.53	—	34,934
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	13,916	13,916	1.76	0.21	—	14,024
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	9,326	9,326	1.18	0.14	—	9,399
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Total	—	—	—	—	—	—	—	—	—	—	—	—	57,909	57,909	7.33	0.89	—	58,357
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	34,666	34,666	4.39	0.53	—	34,934
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	13,916	13,916	1.76	0.21	—	14,024
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	9,326	9,326	1.18	0.14	—	9,399
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	57,909	57,909	7.33	0.89	—	58,357
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	5,739	5,739	0.73	0.09	—	5,784
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	2,304	2,304	0.29	0.04	—	2,322
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	1,544	1,544	0.20	0.02	—	1,556
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	9,587	9,587	1.21	0.15	—	9,662

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	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Refrigerated Warehouse-No Rail	0.00	0.00	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
User Defined Industrial	0.00	0.00	0.00	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Refrigerated Warehouse-No Rail	0.00	0.00	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
User Defined Industrial	0.00	0.00	0.00	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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Refrigerated Warehouse-No Rail	0.00	0.00	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
User Defined Industrial	0.00	0.00	0.00	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	245	245	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	19.2	19.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	88.1	81.3	4.16	495	0.03	0.88	—	0.88	0.66	—	0.66	—	2,034	2,034	0.09	0.02	—	2,041
Total	352	345	4.16	495	0.03	0.88	—	0.88	0.66	—	0.66	—	2,034	2,034	0.09	0.02	—	2,041
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	245	245	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	19.2	19.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	264	264	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	44.6	44.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	3.50	3.50	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	7.93	7.32	0.37	44.5	< 0.005	0.08	—	0.08	0.06	—	0.06	—	166	166	0.01	< 0.005	—	167

Total	56.1	55.5	0.37	44.5	< 0.005	0.08	—	0.08	0.06	—	0.06	—	166	166	0.01	< 0.005	—	167

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	—	—	—	—	—	—	—	—	—	—	—	4,594	10,074	14,668	472	11.3	—	29,857
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	446	958	1,405	45.9	1.10	—	2,880
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	5,040	11,033	16,073	518	12.4	—	32,737
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	4,594	10,074	14,668	472	11.3	—	29,857

Refrigerated	—	—	—	—	—	—	—	—	—	—	—	446	958	1,405	45.9	1.10	—	2,880
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	5,040	11,033	16,073	518	12.4	—	32,737
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	761	1,668	2,428	78.2	1.88	—	4,943
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	73.9	159	233	7.60	0.18	—	477
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	834	1,827	2,661	85.8	2.06	—	5,420

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unrefrig Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	5,252	0.00	5,252	525	0.00	—	18,374
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	510	0.00	510	51.0	0.00	—	1,785
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	5,762	0.00	5,762	576	0.00	—	20,159
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	5,252	0.00	5,252	525	0.00	—	18,374
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	510	0.00	510	51.0	0.00	—	1,785
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	5,762	0.00	5,762	576	0.00	—	20,159
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	869	0.00	869	86.9	0.00	—	3,042
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	84.5	0.00	84.5	8.44	0.00	—	296
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	954	0.00	954	95.3	0.00	—	3,338

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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,027	1,027
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,027	1,027
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Refrigerated	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,027	1,027
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,027	1,027
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	170	170
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	170	170

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Fire Pump	5.95	5.41	15.1	13.8	0.03	0.80	0.00	0.80	0.80	0.00	0.80	0.00	2,770	2,770	0.11	0.02	0.00	2,780
Emergency Generator	8.84	8.04	22.5	20.5	0.04	1.18	0.00	1.18	1.18	0.00	1.18	0.00	4,114	4,114	0.17	0.03	0.00	4,127
Total	14.8	13.5	37.6	34.3	0.06	1.98	0.00	1.98	1.98	0.00	1.98	0.00	6,884	6,884	0.28	0.05	0.00	6,907
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Fire Pump	5.95	5.41	15.1	13.8	0.03	0.80	0.00	0.80	0.80	0.00	0.80	0.00	2,770	2,770	0.11	0.02	0.00	2,780
Emergency Generator	8.84	8.04	22.5	20.5	0.04	1.18	0.00	1.18	1.18	0.00	1.18	0.00	4,114	4,114	0.17	0.03	0.00	4,127
Total	14.8	13.5	37.6	34.3	0.06	1.98	0.00	1.98	1.98	0.00	1.98	0.00	6,884	6,884	0.28	0.05	0.00	6,907
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Fire Pump	0.15	0.14	0.38	0.35	< 0.005	0.02	0.00	0.02	0.02	0.00	0.02	0.00	62.8	62.8	< 0.005	< 0.005	0.00	63.0
Emergency Generator	0.22	0.20	0.56	0.51	< 0.005	0.03	0.00	0.03	0.03	0.00	0.03	0.00	93.3	93.3	< 0.005	< 0.005	0.00	93.6
Total	0.37	0.34	0.94	0.86	< 0.005	0.05	0.00	0.05	0.05	0.00	0.05	0.00	156	156	0.01	< 0.005	0.00	157

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	14,866	1,213	487	3,964,315	87,104	7,107	2,855	23,228,804
Refrigerated Warehouse-No Rail	1,380	97.7	39.3	366,891	8,085	572	230	2,149,788
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

User Defined Industrial	4,936	432	171	1,318,366	171,878	15,049	5,940	45,905,515

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	17,060,552	5,686,851	894,060

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

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	48,519,179	261	0.0330	0.0040	0.00
Refrigerated Warehouse-No Rail	19,477,199	261	0.0330	0.0040	0.00
Parking Lot	13,053,280	261	0.0330	0.0040	0.00
User Defined Industrial	0.00	261	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	2,397,254,513	70,016,578
Refrigerated Warehouse-No Rail	232,913,844	0.00
Parking Lot	0.00	0.00
User Defined Industrial	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	9,745	—
Refrigerated Warehouse-No Rail	947	—
Parking Lot	0.00	—
User Defined Industrial	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	User Defined	150	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

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
Fire Pump	Diesel	11.0	1.00	50.0	300	0.73
Emergency Generator	Diesel	7.00	1.00	50.0	700	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	36.0	annual days of extreme heat
Extreme Precipitation	1.45	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	1.70	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	5	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A

Wildfire	1	0	0	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	0	0	0	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	5	1	1	4
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
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	1	1	1	2

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	88.7
AQ-PM	5.81
AQ-DPM	4.06
Drinking Water	85.4
Lead Risk Housing	21.0
Pesticides	38.2
Toxic Releases	69.3
Traffic	8.11
Effect Indicators	—
CleanUp Sites	78.1
Groundwater	2.11
Haz Waste Facilities/Generators	88.6
Impaired Water Bodies	0.00
Solid Waste	75.7
Sensitive Population	—
Asthma	74.6
Cardio-vascular	53.5
Low Birth Weights	13.2
Socioeconomic Factor Indicators	—
Education	42.3
Housing	38.1
Linguistic	32.0
Poverty	61.8
Unemployment	26.9

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	67.56063134
Employed	13.29398178
Median HI	45.83600667
Education	—
Bachelor's or higher	38.31643783
High school enrollment	100
Preschool enrollment	48.45374054
Transportation	—
Auto Access	66.18760426
Active commuting	14.50019248
Social	—
2-parent households	65.622995
Voting	65.36635442
Neighborhood	—
Alcohol availability	88.70781471
Park access	23.43128449
Retail density	4.080585141
Supermarket access	30.32208392
Tree canopy	85.67945592
Housing	—
Homeownership	75.37533684
Housing habitability	76.05543436
Low-inc homeowner severe housing cost burden	38.73989478
Low-inc renter severe housing cost burden	63.54420634

Uncrowded housing	83.16437829
Health Outcomes	—
Insured adults	61.15744899
Arthritis	73.2
Asthma ER Admissions	41.1
High Blood Pressure	77.3
Cancer (excluding skin)	55.0
Asthma	43.1
Coronary Heart Disease	72.1
Chronic Obstructive Pulmonary Disease	62.6
Diagnosed Diabetes	68.9
Life Expectancy at Birth	4.1
Cognitively Disabled	94.6
Physically Disabled	49.3
Heart Attack ER Admissions	35.9
Mental Health Not Good	46.4
Chronic Kidney Disease	79.8
Obesity	42.9
Pedestrian Injuries	90.4
Physical Health Not Good	57.2
Stroke	70.4
Health Risk Behaviors	—
Binge Drinking	11.9
Current Smoker	43.1
No Leisure Time for Physical Activity	66.6
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0

Children	88.7
Elderly	25.8
English Speaking	89.3
Foreign-born	8.1
Outdoor Workers	46.5
Climate Change Adaptive Capacity	—
Impervious Surface Cover	93.4
Traffic Density	4.7
Traffic Access	23.0
Other Indices	—
Hardship	48.4
Other Decision Support	—
2016 Voting	51.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	46.0
Healthy Places Index Score for Project Location (b)	49.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
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: Vehicle Data	Fleet mix adjusted based on Project trip generation summary and to separate passenger cars and industrial trucks.
Operations: Fleet Mix	Fleet mix adjusted to separate passenger vehicles and trucks.
Operations: Energy Use	Project will not use natural gas.
Operations: Refrigerants	As of 1 January 2022, new commercial refrigeration equipment may not use refrigerants with a GWP of 150 or greater.

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APPENDIX 4.3:

CALEEMOD PAS 2, 4, 6 (EAST HALF), 7 & 8 OPERATIONAL EMISSIONS MODEL OUTPUTS - 2040

16126 AVCC Ops PAs 2, 4, 6E, 7, 8 2040 Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	16126 AVCC Ops PAs 2, 4, 6E, 7, 8 2040
Operational Year	2040
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	5.00
Precipitation (days)	13.0
Location	34.77190866778564, -118.15416969812995
County	Los Angeles-Mojave Desert
City	Unincorporated
Air District	Antelope Valley AQMD
Air Basin	Mojave Desert
TAZ	3673
EDFZ	7
Electric Utility	Southern California Edison
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	10,367	1000sqft	238	10,366,506	4,326,205	—	—	—

Refrigerated Warehouse-No Rail	1,007	1000sqft	23.1	1,007,195	0.00	—	—	—
Parking Lot	342	Acre	342	0.00	0.00	—	—	—
User Defined Industrial	11,374	User Defined Unit	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.	420	408	334	895	3.78	7.41	217	224	6.99	56.9	63.9	10,802	464,049	474,851	1,105	63.8	1,378	522,864
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	329	323	347	348	3.69	6.53	217	223	6.33	56.9	63.3	10,802	456,088	466,890	1,105	63.9	1,036	514,606
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	346	340	234	490	2.68	4.03	157	161	3.78	41.4	45.1	10,802	350,026	360,828	1,104	50.3	1,138	404,572
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	63.1	62.0	42.8	89.4	0.49	0.74	28.7	29.4	0.69	7.55	8.24	1,788	57,951	59,739	183	8.33	188	66,981

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	53.3	49.4	292	366	3.68	4.55	217	221	4.35	56.9	61.3	—	386,190	386,190	3.55	50.4	352	401,636
Area	352	345	4.16	495	0.03	0.88	—	0.88	0.66	—	0.66	—	2,034	2,034	0.09	0.02	—	2,041
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	57,909	57,909	7.33	0.89	—	58,357
Water	—	—	—	—	—	—	—	—	—	—	—	5,040	11,033	16,073	518	12.4	—	32,737
Waste	—	—	—	—	—	—	—	—	—	—	—	5,762	0.00	5,762	576	0.00	—	20,159
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,027	1,027
Stationary	14.8	13.5	37.6	34.3	0.06	1.98	0.00	1.98	1.98	0.00	1.98	0.00	6,884	6,884	0.28	0.05	0.00	6,907
Total	420	408	334	895	3.78	7.41	217	224	6.99	56.9	63.9	10,802	464,049	474,851	1,105	63.8	1,378	522,864
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	50.1	46.3	309	314	3.62	4.55	217	221	4.35	56.9	61.3	—	380,262	380,262	3.73	50.5	9.13	395,419
Area	264	264	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	57,909	57,909	7.33	0.89	—	58,357
Water	—	—	—	—	—	—	—	—	—	—	—	5,040	11,033	16,073	518	12.4	—	32,737
Waste	—	—	—	—	—	—	—	—	—	—	—	5,762	0.00	5,762	576	0.00	—	20,159
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,027	1,027
Stationary	14.8	13.5	37.6	34.3	0.06	1.98	0.00	1.98	1.98	0.00	1.98	0.00	6,884	6,884	0.28	0.05	0.00	6,907
Total	329	323	347	348	3.69	6.53	217	223	6.33	56.9	63.3	10,802	456,088	466,890	1,105	63.9	1,036	514,606
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	36.7	33.9	227	241	2.66	3.33	157	161	3.18	41.4	44.5	—	279,139	279,139	2.76	37.0	111	290,339
Area	307	304	2.05	244	0.01	0.43	—	0.43	0.33	—	0.33	—	1,003	1,003	0.04	0.01	—	1,007
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	57,909	57,909	7.33	0.89	—	58,357
Water	—	—	—	—	—	—	—	—	—	—	—	5,040	11,033	16,073	518	12.4	—	32,737

Waste	—	—	—	—	—	—	—	—	—	—	—	5,762	0.00	5,762	576	0.00	—	20,159
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,027	1,027
Stationary	2.03	1.84	5.15	4.70	0.01	0.27	0.00	0.27	0.27	0.00	0.27	0.00	943	943	0.04	0.01	0.00	946
Total	346	340	234	490	2.68	4.03	157	161	3.78	41.4	45.1	10,802	350,026	360,828	1,104	50.3	1,138	404,572
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	6.70	6.18	41.4	44.0	0.49	0.61	28.7	29.3	0.58	7.55	8.13	—	46,215	46,215	0.46	6.12	18.4	48,069
Area	56.1	55.5	0.37	44.5	< 0.005	0.08	—	0.08	0.06	—	0.06	—	166	166	0.01	< 0.005	—	167
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	9,587	9,587	1.21	0.15	—	9,662
Water	—	—	—	—	—	—	—	—	—	—	—	834	1,827	2,661	85.8	2.06	—	5,420
Waste	—	—	—	—	—	—	—	—	—	—	—	954	0.00	954	95.3	0.00	—	3,338
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	170	170
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	156	156	0.01	< 0.005	0.00	157
Total	63.1	62.0	42.8	89.4	0.49	0.74	28.7	29.4	0.69	7.55	8.24	1,788	57,951	59,739	183	8.33	188	66,981

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	40.5	38.5	11.7	263	0.53	0.15	60.8	61.0	0.14	15.4	15.5	—	53,692	53,692	2.23	1.64	32.3	54,269

Refrigerated Warehouse-No Rail	3.76	3.58	1.09	24.4	0.05	0.01	5.65	5.66	0.01	1.43	1.44	—	4,984	4,984	0.21	0.15	3.00	5,037
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
User Defined Industrial	9.04	7.29	279	78.4	3.10	4.38	150	154	4.19	40.2	44.3	—	327,514	327,514	1.11	48.6	317	342,330
Total	53.3	49.4	292	366	3.68	4.55	217	221	4.35	56.9	61.3	—	386,190	386,190	3.55	50.4	352	401,636
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	38.0	36.0	13.0	214	0.48	0.15	60.8	61.0	0.14	15.4	15.5	—	48,109	48,109	2.42	1.75	0.84	48,693
Refrigerated Warehouse-No Rail	3.53	3.35	1.21	19.9	0.04	0.01	5.65	5.66	0.01	1.43	1.44	—	4,466	4,466	0.22	0.16	0.08	4,520
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
User Defined Industrial	8.56	6.87	295	79.5	3.10	4.39	150	154	4.20	40.2	44.4	—	327,687	327,687	1.09	48.6	8.21	342,207
Total	50.1	46.3	309	314	3.62	4.55	217	221	4.35	56.9	61.3	—	380,262	380,262	3.73	50.5	9.13	395,419
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	5.06	4.79	1.79	30.6	0.07	0.02	8.04	8.06	0.02	2.03	2.05	—	5,976	5,976	0.30	0.22	1.69	6,049

Refrigerated Warehouse-No Rail	0.47	0.44	0.17	2.84	0.01	< 0.005	0.74	0.75	< 0.005	0.19	0.19	—	553	553	0.03	0.02	0.16	560
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
User Defined Industrial	1.18	0.95	39.5	10.5	0.41	0.59	19.9	20.5	0.56	5.33	5.89	—	39,686	39,686	0.13	5.89	16.6	41,460
Total	6.70	6.18	41.4	44.0	0.49	0.61	28.7	29.3	0.58	7.55	8.13	—	46,215	46,215	0.46	6.12	18.4	48,069

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	—	—	—	—	—	—	—	—	—	—	—	—	34,666	34,666	4.39	0.53	—	34,934
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	13,916	13,916	1.76	0.21	—	14,024
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	9,326	9,326	1.18	0.14	—	9,399
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Total	—	—	—	—	—	—	—	—	—	—	—	—	57,909	57,909	7.33	0.89	—	58,357
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	34,666	34,666	4.39	0.53	—	34,934
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	13,916	13,916	1.76	0.21	—	14,024
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	9,326	9,326	1.18	0.14	—	9,399
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	57,909	57,909	7.33	0.89	—	58,357
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	5,739	5,739	0.73	0.09	—	5,784
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	2,304	2,304	0.29	0.04	—	2,322
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	1,544	1,544	0.20	0.02	—	1,556
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	9,587	9,587	1.21	0.15	—	9,662

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	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Refrigerated Warehouse-No Rail	0.00	0.00	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
User Defined Industrial	0.00	0.00	0.00	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Refrigerated Warehouse-No Rail	0.00	0.00	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
User Defined Industrial	0.00	0.00	0.00	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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Refrigerated Warehouse-No Rail	0.00	0.00	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
User Defined Industrial	0.00	0.00	0.00	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	245	245	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	19.2	19.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	88.1	81.3	4.16	495	0.03	0.88	—	0.88	0.66	—	0.66	—	2,034	2,034	0.09	0.02	—	2,041
Total	352	345	4.16	495	0.03	0.88	—	0.88	0.66	—	0.66	—	2,034	2,034	0.09	0.02	—	2,041
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	245	245	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	19.2	19.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	264	264	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	44.6	44.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	3.50	3.50	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	7.93	7.32	0.37	44.5	< 0.005	0.08	—	0.08	0.06	—	0.06	—	166	166	0.01	< 0.005	—	167

Total	56.1	55.5	0.37	44.5	< 0.005	0.08	—	0.08	0.06	—	0.06	—	166	166	0.01	< 0.005	—	167

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	—	—	—	—	—	—	—	—	—	—	—	4,594	10,074	14,668	472	11.3	—	29,857
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	446	958	1,405	45.9	1.10	—	2,880
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	5,040	11,033	16,073	518	12.4	—	32,737
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	4,594	10,074	14,668	472	11.3	—	29,857

Refrigerated	—	—	—	—	—	—	—	—	—	—	—	446	958	1,405	45.9	1.10	—	2,880
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	5,040	11,033	16,073	518	12.4	—	32,737
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	761	1,668	2,428	78.2	1.88	—	4,943
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	73.9	159	233	7.60	0.18	—	477
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	834	1,827	2,661	85.8	2.06	—	5,420

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unrefrig Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	5,252	0.00	5,252	525	0.00	—	18,374
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	510	0.00	510	51.0	0.00	—	1,785
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	5,762	0.00	5,762	576	0.00	—	20,159
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	5,252	0.00	5,252	525	0.00	—	18,374
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	510	0.00	510	51.0	0.00	—	1,785
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	5,762	0.00	5,762	576	0.00	—	20,159
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	869	0.00	869	86.9	0.00	—	3,042
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	84.5	0.00	84.5	8.44	0.00	—	296
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	954	0.00	954	95.3	0.00	—	3,338

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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,027	1,027
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,027	1,027
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Refrigerated	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,027	1,027
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,027	1,027
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	170	170
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	170	170

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Fire Pump	5.95	5.41	15.1	13.8	0.03	0.80	0.00	0.80	0.80	0.00	0.80	0.00	2,770	2,770	0.11	0.02	0.00	2,780
Emergency Generator	8.84	8.04	22.5	20.5	0.04	1.18	0.00	1.18	1.18	0.00	1.18	0.00	4,114	4,114	0.17	0.03	0.00	4,127
Total	14.8	13.5	37.6	34.3	0.06	1.98	0.00	1.98	1.98	0.00	1.98	0.00	6,884	6,884	0.28	0.05	0.00	6,907
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Fire Pump	5.95	5.41	15.1	13.8	0.03	0.80	0.00	0.80	0.80	0.00	0.80	0.00	2,770	2,770	0.11	0.02	0.00	2,780
Emergency Generator	8.84	8.04	22.5	20.5	0.04	1.18	0.00	1.18	1.18	0.00	1.18	0.00	4,114	4,114	0.17	0.03	0.00	4,127
Total	14.8	13.5	37.6	34.3	0.06	1.98	0.00	1.98	1.98	0.00	1.98	0.00	6,884	6,884	0.28	0.05	0.00	6,907
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Fire Pump	0.15	0.14	0.38	0.35	< 0.005	0.02	0.00	0.02	0.02	0.00	0.02	0.00	62.8	62.8	< 0.005	< 0.005	0.00	63.0
Emergency Generator	0.22	0.20	0.56	0.51	< 0.005	0.03	0.00	0.03	0.03	0.00	0.03	0.00	93.3	93.3	< 0.005	< 0.005	0.00	93.6
Total	0.37	0.34	0.94	0.86	< 0.005	0.05	0.00	0.05	0.05	0.00	0.05	0.00	156	156	0.01	< 0.005	0.00	157

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
Unrefrigerated Warehouse-No Rail	14,866	1,213	487	3,964,315	87,104	7,107	2,855	23,228,804
Refrigerated Warehouse-No Rail	1,380	97.7	39.3	366,891	8,085	572	230	2,149,788
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

User Defined Industrial	4,936	432	171	1,318,366	171,927	15,054	5,942	45,918,698

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	17,060,552	5,686,851	894,060

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

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	48,519,179	261	0.0330	0.0040	0.00
Refrigerated Warehouse-No Rail	19,477,199	261	0.0330	0.0040	0.00
Parking Lot	13,053,280	261	0.0330	0.0040	0.00
User Defined Industrial	0.00	261	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	2,397,254,513	70,016,578
Refrigerated Warehouse-No Rail	232,913,844	0.00
Parking Lot	0.00	0.00
User Defined Industrial	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	9,745	—
Refrigerated Warehouse-No Rail	947	—
Parking Lot	0.00	—
User Defined Industrial	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	User Defined	150	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

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
Fire Pump	Diesel	11.0	1.00	50.0	300	0.73
Emergency Generator	Diesel	7.00	1.00	50.0	700	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	36.0	annual days of extreme heat
Extreme Precipitation	1.45	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	1.70	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	5	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A

Wildfire	1	0	0	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	0	0	0	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	5	1	1	4
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
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	1	1	1	2

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	88.7
AQ-PM	5.81
AQ-DPM	4.06
Drinking Water	85.4
Lead Risk Housing	21.0
Pesticides	38.2
Toxic Releases	69.3
Traffic	8.11
Effect Indicators	—
CleanUp Sites	78.1
Groundwater	2.11
Haz Waste Facilities/Generators	88.6
Impaired Water Bodies	0.00
Solid Waste	75.7
Sensitive Population	—
Asthma	74.6
Cardio-vascular	53.5
Low Birth Weights	13.2
Socioeconomic Factor Indicators	—
Education	42.3
Housing	38.1
Linguistic	32.0
Poverty	61.8
Unemployment	26.9

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	67.56063134
Employed	13.29398178
Median HI	45.83600667
Education	—
Bachelor's or higher	38.31643783
High school enrollment	100
Preschool enrollment	48.45374054
Transportation	—
Auto Access	66.18760426
Active commuting	14.50019248
Social	—
2-parent households	65.622995
Voting	65.36635442
Neighborhood	—
Alcohol availability	88.70781471
Park access	23.43128449
Retail density	4.080585141
Supermarket access	30.32208392
Tree canopy	85.67945592
Housing	—
Homeownership	75.37533684
Housing habitability	76.05543436
Low-inc homeowner severe housing cost burden	38.73989478
Low-inc renter severe housing cost burden	63.54420634

Uncrowded housing	83.16437829
Health Outcomes	—
Insured adults	61.15744899
Arthritis	73.2
Asthma ER Admissions	41.1
High Blood Pressure	77.3
Cancer (excluding skin)	55.0
Asthma	43.1
Coronary Heart Disease	72.1
Chronic Obstructive Pulmonary Disease	62.6
Diagnosed Diabetes	68.9
Life Expectancy at Birth	4.1
Cognitively Disabled	94.6
Physically Disabled	49.3
Heart Attack ER Admissions	35.9
Mental Health Not Good	46.4
Chronic Kidney Disease	79.8
Obesity	42.9
Pedestrian Injuries	90.4
Physical Health Not Good	57.2
Stroke	70.4
Health Risk Behaviors	—
Binge Drinking	11.9
Current Smoker	43.1
No Leisure Time for Physical Activity	66.6
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0

Children	88.7
Elderly	25.8
English Speaking	89.3
Foreign-born	8.1
Outdoor Workers	46.5
Climate Change Adaptive Capacity	—
Impervious Surface Cover	93.4
Traffic Density	4.7
Traffic Access	23.0
Other Indices	—
Hardship	48.4
Other Decision Support	—
2016 Voting	51.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	46.0
Healthy Places Index Score for Project Location (b)	49.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
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: Vehicle Data	Fleet mix adjusted based on Project trip generation summary and to separate passenger cars and industrial trucks.
Operations: Fleet Mix	Fleet mix adjusted to separate passenger vehicles and trucks.
Operations: Energy Use	Project will not use natural gas.
Operations: Refrigerants	As of 1 January 2022, new commercial refrigeration equipment may not use refrigerants with a GWP of 150 or greater.

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APPENDIX 4.4:

CALEEMOD PA 6 (WEST HALF) OPERATIONAL EMISSIONS MODEL OUTPUTS - 2040

16126 AVCC Ops PA6 West 2040 Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	16126 AVCC Ops PA6 West 2040
Operational Year	2040
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	5.00
Precipitation (days)	13.0
Location	34.74473558151715, -118.16161603802243
County	Los Angeles-Mojave Desert
City	Unincorporated
Air District	Antelope Valley AQMD
Air Basin	Mojave Desert
TAZ	3673
EDFZ	7
Electric Utility	Southern California Edison
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	60.0	1000sqft	1.38	60,000	0.00	—	—	—

Unrefrigerated Warehouse-No Rail	1,955	1000sqft	44.9	1,955,072	710,464	—	—	—
Parking Lot	53.9	Acre	53.9	0.00	0.00	—	—	—
User Defined Industrial	1,955	User Defined Unit	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.	75.8	72.7	68.8	238	0.92	1.96	60.7	62.7	1.88	15.7	17.6	1,907	112,696	114,603	196	11.8	74.3	123,096
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	59.6	57.7	71.4	119	0.89	1.81	60.7	62.5	1.77	15.7	17.5	1,907	109,274	111,181	196	11.8	1.97	119,617
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	63.6	61.5	54.1	138	0.67	1.53	44.4	45.9	1.48	11.5	13.0	1,907	86,827	88,734	196	9.30	23.6	96,433
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	11.6	11.2	9.87	25.2	0.12	0.28	8.10	8.38	0.27	2.10	2.37	316	14,375	14,691	32.5	1.54	3.90	15,966

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	11.3	10.0	54.8	139	0.85	0.86	60.7	61.6	0.82	15.7	16.6	—	88,556	88,556	1.02	9.41	74.3	91,460
Area	62.3	61.1	0.74	87.6	0.01	0.16	—	0.16	0.12	—	0.12	—	360	360	0.02	< 0.005	—	362
Energy	1.16	0.58	10.5	8.85	0.06	0.80	—	0.80	0.80	—	0.80	—	21,337	21,337	2.22	0.16	—	21,440
Water	—	—	—	—	—	—	—	—	—	—	—	887	1,939	2,825	91.2	2.19	—	5,758
Waste	—	—	—	—	—	—	—	—	—	—	—	1,021	0.00	1,021	102	0.00	—	3,570
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.04	0.04
Stationary	1.08	0.98	2.75	2.51	< 0.005	0.14	0.00	0.14	0.14	0.00	0.14	0.00	504	504	0.02	< 0.005	0.00	505
Total	75.8	72.7	68.8	238	0.92	1.96	60.7	62.7	1.88	15.7	17.6	1,907	112,696	114,603	196	11.8	74.3	123,096
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	10.7	9.47	58.1	108	0.82	0.86	60.7	61.6	0.82	15.7	16.6	—	85,494	85,494	1.03	9.47	1.93	88,343
Area	46.7	46.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	1.16	0.58	10.5	8.85	0.06	0.80	—	0.80	0.80	—	0.80	—	21,337	21,337	2.22	0.16	—	21,440
Water	—	—	—	—	—	—	—	—	—	—	—	887	1,939	2,825	91.2	2.19	—	5,758
Waste	—	—	—	—	—	—	—	—	—	—	—	1,021	0.00	1,021	102	0.00	—	3,570
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.04	0.04
Stationary	1.08	0.98	2.75	2.51	< 0.005	0.14	0.00	0.14	0.14	0.00	0.14	0.00	504	504	0.02	< 0.005	0.00	505
Total	59.6	57.7	71.4	119	0.89	1.81	60.7	62.5	1.77	15.7	17.5	1,907	109,274	111,181	196	11.8	1.97	119,617
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	7.93	7.02	42.8	85.4	0.61	0.63	44.4	45.0	0.60	11.5	12.1	—	63,304	63,304	0.77	6.95	23.5	65,417
Area	54.4	53.8	0.36	43.2	< 0.005	0.08	—	0.08	0.06	—	0.06	—	178	178	0.01	< 0.005	—	178
Energy	1.16	0.58	10.5	8.85	0.06	0.80	—	0.80	0.80	—	0.80	—	21,337	21,337	2.22	0.16	—	21,440
Water	—	—	—	—	—	—	—	—	—	—	—	887	1,939	2,825	91.2	2.19	—	5,758

Waste	—	—	—	—	—	—	—	—	—	—	—	1,021	0.00	1,021	102	0.00	—	3,570
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.04	0.04
Stationary	0.15	0.13	0.38	0.34	< 0.005	0.02	0.00	0.02	0.02	0.00	0.02	0.00	69.0	69.0	< 0.005	< 0.005	0.00	69.2
Total	63.6	61.5	54.1	138	0.67	1.53	44.4	45.9	1.48	11.5	13.0	1,907	86,827	88,734	196	9.30	23.6	96,433
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.45	1.28	7.82	15.6	0.11	0.12	8.10	8.21	0.11	2.10	2.21	—	10,481	10,481	0.13	1.15	3.90	10,831
Area	9.92	9.82	0.07	7.89	< 0.005	0.01	—	0.01	0.01	—	0.01	—	29.4	29.4	< 0.005	< 0.005	—	29.5
Energy	0.21	0.11	1.92	1.61	0.01	0.15	—	0.15	0.15	—	0.15	—	3,533	3,533	0.37	0.03	—	3,550
Water	—	—	—	—	—	—	—	—	—	—	—	147	321	468	15.1	0.36	—	953
Waste	—	—	—	—	—	—	—	—	—	—	—	169	0.00	169	16.9	0.00	—	591
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
Stationary	0.03	0.02	0.07	0.06	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	11.4	11.4	< 0.005	< 0.005	0.00	11.5
Total	11.6	11.2	9.87	25.2	0.12	0.28	8.10	8.38	0.27	2.10	2.37	316	14,375	14,691	32.5	1.54	3.90	15,966

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	2.55	2.28	2.08	30.9	0.08	0.03	8.91	8.94	0.03	2.26	2.29	—	8,354	8,354	0.23	0.31	6.47	8,457

Unrefrigerated	7.19	6.51	3.32	94.7	0.22	0.05	25.5	25.6	0.05	6.45	6.50	—	21,955	21,955	0.59	0.44	13.6	22,113
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
User Defined Industrial	1.54	1.24	49.4	13.4	0.55	0.77	26.3	27.1	0.74	7.03	7.77	—	58,248	58,248	0.20	8.67	54.2	60,890
Total	11.3	10.0	54.8	139	0.85	0.86	60.7	61.6	0.82	15.7	16.6	—	88,556	88,556	1.02	9.41	74.3	91,460
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	2.41	2.15	2.27	23.4	0.07	0.03	8.91	8.94	0.03	2.26	2.29	—	7,609	7,609	0.24	0.32	0.17	7,710
Unrefrigerated Warehouse-No Rail	6.82	6.16	3.74	71.0	0.19	0.05	25.5	25.6	0.05	6.45	6.50	—	19,607	19,607	0.60	0.47	0.35	19,763
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
User Defined Industrial	1.46	1.16	52.1	13.6	0.55	0.77	26.3	27.1	0.74	7.03	7.77	—	58,278	58,278	0.19	8.68	1.41	60,870
Total	10.7	9.47	58.1	108	0.82	0.86	60.7	61.6	0.82	15.7	16.6	—	85,494	85,494	1.03	9.47	1.93	88,343
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.33	0.29	0.32	3.47	0.01	< 0.005	1.21	1.22	< 0.005	0.31	0.31	—	969	969	0.03	0.04	0.35	983
Unrefrigerated Warehouse-No Rail	0.92	0.83	0.52	10.3	0.03	0.01	3.40	3.40	0.01	0.86	0.86	—	2,454	2,454	0.07	0.06	0.71	2,474
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

User Defined Industrial	0.20	0.16	6.98	1.80	0.07	0.10	3.49	3.59	0.10	0.93	1.03	—	7,058	7,058	0.02	1.05	2.84	7,374
Total	1.45	1.28	7.82	15.6	0.11	0.12	8.10	8.21	0.11	2.10	2.21	—	10,481	10,481	0.13	1.15	3.90	10,831

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	—	—	—	—	—	—	—	—	—	—	—	—	764	764	0.10	0.01	—	770
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	6,538	6,538	0.83	0.10	—	6,588
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	1,470	1,470	0.19	0.02	—	1,482
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	8,772	8,772	1.11	0.13	—	8,840
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	764	764	0.10	0.01	—	770

Unrefrigerated	—	—	—	—	—	—	—	—	—	—	—	—	6,538	6,538	0.83	0.10	—	6,588
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	1,470	1,470	0.19	0.02	—	1,482
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	8,772	8,772	1.11	0.13	—	8,840
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	126	126	0.02	< 0.005	—	127
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	1,082	1,082	0.14	0.02	—	1,091
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	243	243	0.03	< 0.005	—	245
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,452	1,452	0.18	0.02	—	1,464

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	0.04	0.02	0.41	0.34	< 0.005	0.03	—	0.03	0.03	—	0.03	—	487	487	0.04	< 0.005	—	489

Unrefrigerated	1.11	0.56	10.1	8.50	0.06	0.77	—	0.77	0.77	—	0.77	—	12,078	12,078	1.07	0.02	—	12,111
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
User Defined Industrial	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	1.16	0.58	10.5	8.85	0.06	0.80	—	0.80	0.80	—	0.80	—	12,565	12,565	1.11	0.02	—	12,600
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.04	0.02	0.41	0.34	< 0.005	0.03	—	0.03	0.03	—	0.03	—	487	487	0.04	< 0.005	—	489
Unrefrigerated Warehouse-No Rail	1.11	0.56	10.1	8.50	0.06	0.77	—	0.77	0.77	—	0.77	—	12,078	12,078	1.07	0.02	—	12,111
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
User Defined Industrial	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	1.16	0.58	10.5	8.85	0.06	0.80	—	0.80	0.80	—	0.80	—	12,565	12,565	1.11	0.02	—	12,600
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.01	< 0.005	0.07	0.06	< 0.005	0.01	—	0.01	0.01	—	0.01	—	80.7	80.7	0.01	< 0.005	—	80.9
Unrefrigerated Warehouse-No Rail	0.20	0.10	1.85	1.55	0.01	0.14	—	0.14	0.14	—	0.14	—	2,000	2,000	0.18	< 0.005	—	2,005
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

User Defined Industrial	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.21	0.11	1.92	1.61	0.01	0.15	—	0.15	0.15	—	0.15	—	2,080	2,080	0.18	< 0.005	—	2,086

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	43.3	43.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	3.38	3.38	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	15.6	14.4	0.74	87.6	0.01	0.16	—	0.16	0.12	—	0.12	—	360	360	0.02	< 0.005	—	362
Total	62.3	61.1	0.74	87.6	0.01	0.16	—	0.16	0.12	—	0.12	—	360	360	0.02	< 0.005	—	362
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	43.3	43.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architectural Coatings	3.38	3.38	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	46.7	46.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	7.90	7.90	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.62	0.62	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	1.40	1.30	0.07	7.89	< 0.005	0.01	—	0.01	0.01	—	0.01	—	29.4	29.4	< 0.005	< 0.005	—	29.5
Total	9.92	9.82	0.07	7.89	< 0.005	0.01	—	0.01	0.01	—	0.01	—	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	20.4	43.9	64.3	2.10	0.05	—	132

Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	866	1,895	2,761	89.1	2.14	—	5,626
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	887	1,939	2,825	91.2	2.19	—	5,758
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	20.4	43.9	64.3	2.10	0.05	—	132
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	866	1,895	2,761	89.1	2.14	—	5,626
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	887	1,939	2,825	91.2	2.19	—	5,758
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	3.38	7.26	10.6	0.35	0.01	—	21.8
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	143	314	457	14.7	0.35	—	931

Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	147	321	468	15.1	0.36	—	953

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	—	—	—	—	—	—	—	—	—	—	—	30.1	0.00	30.1	3.01	0.00	—	105
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	990	0.00	990	99.0	0.00	—	3,465
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1,021	0.00	1,021	102	0.00	—	3,570
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Office Building	—	—	—	—	—	—	—	—	—	—	—	30.1	0.00	30.1	3.01	0.00	—	105
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	990	0.00	990	99.0	0.00	—	3,465
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1,021	0.00	1,021	102	0.00	—	3,570
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	4.98	0.00	4.98	0.50	0.00	—	17.4
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	164	0.00	164	16.4	0.00	—	574
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	169	0.00	169	16.9	0.00	—	591

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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.04	0.04
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.04	0.04
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.04	0.04
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.04	0.04
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Fire Pump	1.08	0.98	2.75	2.51	< 0.005	0.14	0.00	0.14	0.14	0.00	0.14	0.00	504	504	0.02	< 0.005	0.00	505
Total	1.08	0.98	2.75	2.51	< 0.005	0.14	0.00	0.14	0.14	0.00	0.14	0.00	504	504	0.02	< 0.005	0.00	505
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Fire Pump	1.08	0.98	2.75	2.51	< 0.005	0.14	0.00	0.14	0.14	0.00	0.14	0.00	504	504	0.02	< 0.005	0.00	505
Total	1.08	0.98	2.75	2.51	< 0.005	0.14	0.00	0.14	0.14	0.00	0.14	0.00	504	504	0.02	< 0.005	0.00	505
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Fire Pump	0.03	0.02	0.07	0.06	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	11.4	11.4	< 0.005	< 0.005	0.00	11.5
Total	0.03	0.02	0.07	0.06	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	11.4	11.4	< 0.005	< 0.005	0.00	11.5

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	650	133	42.0	178,563	12,575	2,565	813	3,454,575

Unrefrigerated Warehouse-No Rail	1,889	201	80.2	507,065	36,538	3,896	1,551	9,809,931
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
User Defined Industrial	850	74.3	29.3	227,129	30,123	2,631	1,039	8,044,912

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	3,022,608	1,007,536	140,951

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

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	1,069,217	261	0.0330	0.0040	1,520,788
Unrefrigerated Warehouse-No Rail	9,150,447	261	0.0330	0.0040	37,686,254

Parking Lot	2,057,891	261	0.0330	0.0040	0.00
User Defined Industrial	0.00	261	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	10,664,025	0.00
Unrefrigerated Warehouse-No Rail	452,110,400	11,498,359
Parking Lot	0.00	0.00
User Defined Industrial	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
General Office Building	55.8	—
Unrefrigerated Warehouse-No Rail	1,838	—
Parking Lot	0.00	—
User Defined Industrial	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	User Defined	150	0.02	0.60	0.00	1.00

General Office Building	Other commercial A/C and heat pumps	User Defined	750	< 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
Fire Pump	Diesel	2.00	1.00	50.0	300	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	35.5	annual days of extreme heat
Extreme Precipitation	1.35	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.00	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	5	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	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	0	0	0	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	5	1	1	4
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
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	1	1	1	2

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	88.7
AQ-PM	5.81
AQ-DPM	4.06
Drinking Water	85.4
Lead Risk Housing	21.0
Pesticides	38.2
Toxic Releases	69.3
Traffic	8.11
Effect Indicators	—
CleanUp Sites	78.1
Groundwater	2.11
Haz Waste Facilities/Generators	88.6
Impaired Water Bodies	0.00
Solid Waste	75.7
Sensitive Population	—
Asthma	74.6
Cardio-vascular	53.5
Low Birth Weights	13.2

Socioeconomic Factor Indicators	—
Education	42.3
Housing	38.1
Linguistic	32.0
Poverty	61.8
Unemployment	26.9

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	67.56063134
Employed	13.29398178
Median HI	45.83600667
Education	—
Bachelor's or higher	38.31643783
High school enrollment	100
Preschool enrollment	48.45374054
Transportation	—
Auto Access	66.18760426
Active commuting	14.50019248
Social	—
2-parent households	65.622995
Voting	65.36635442
Neighborhood	—
Alcohol availability	88.70781471
Park access	23.43128449
Retail density	4.080585141

Supermarket access	30.32208392
Tree canopy	85.67945592
Housing	—
Homeownership	75.37533684
Housing habitability	76.05543436
Low-inc homeowner severe housing cost burden	38.73989478
Low-inc renter severe housing cost burden	63.54420634
Uncrowded housing	83.16437829
Health Outcomes	—
Insured adults	61.15744899
Arthritis	73.2
Asthma ER Admissions	41.1
High Blood Pressure	77.3
Cancer (excluding skin)	55.0
Asthma	43.1
Coronary Heart Disease	72.1
Chronic Obstructive Pulmonary Disease	62.6
Diagnosed Diabetes	68.9
Life Expectancy at Birth	4.1
Cognitively Disabled	94.6
Physically Disabled	49.3
Heart Attack ER Admissions	35.9
Mental Health Not Good	46.4
Chronic Kidney Disease	79.8
Obesity	42.9
Pedestrian Injuries	90.4
Physical Health Not Good	57.2
Stroke	70.4

Health Risk Behaviors	—
Binge Drinking	11.9
Current Smoker	43.1
No Leisure Time for Physical Activity	66.6
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	88.7
Elderly	25.8
English Speaking	89.3
Foreign-born	8.1
Outdoor Workers	46.5
Climate Change Adaptive Capacity	—
Impervious Surface Cover	93.4
Traffic Density	4.7
Traffic Access	23.0
Other Indices	—
Hardship	48.4
Other Decision Support	—
2016 Voting	51.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	46.0
Healthy Places Index Score for Project Location (b)	49.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
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: Vehicle Data	Trip characteristics based on Project transportation assessment.
Operations: Fleet Mix	Fleet mix adjusted to separate passenger vehicles and trucks.
Operations: Energy Use	Project will not use natural gas.
Operations: Refrigerants	As of 1 January 2022, new commercial refrigeration equipment may not use refrigerants with a GWP of 150 or greater. Further, R-404A (the CalEEMod default) is unacceptable for new supermarket and cold storage systems as of 1 January 2019 and 2023, respectively. Beginning 1 January 2025, all new air conditioning equipment may not use refrigerants with a GWP of 750 or greater.

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APPENDIX 4.5:

CALEEMOD PAS 1, 3, 5 OPERATIONAL EMISSIONS MODEL OUTPUTS - 2040

16126 - PAs 1, 3, 5 (2040) Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	16126 - PAs 1, 3, 5 (2040)
Operational Year	2040
Lead Agency	—
Land Use Scale	Plan/community
Analysis Level for Defaults	County
Windspeed (m/s)	5.00
Precipitation (days)	13.0
Location	34.77026356696756, -118.16507019821043
County	Los Angeles-Mojave Desert
City	Unincorporated
Air District	Antelope Valley AQMD
Air Basin	Mojave Desert
TAZ	3673
EDFZ	7
Electric Utility	Southern California Edison
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	8,271	1000sqft	190	8,271,173	0.00	—	—	IP Trucks
Unrefrigerated Warehouse-No Rail	5,169	1000sqft	119	5,169,483	0.00	—	—	W Trucks

Unrefrigerated Warehouse-No Rail	5,169	1000sqft	119	5,169,483	0.00	—	—	HCPH Trucks
Refrigerated Warehouse-No Rail	2,068	1000sqft	47.5	2,067,793	0.00	—	—	HCCS Trucks
User Defined Industrial	20,678	User Defined Unit	0.00	0.00	0.00	—	—	PC

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.	842	810	872	2,198	9.62	24.9	545	570	24.1	143	167	20,976	1,262,954	1,283,930	2,168	138	3,682	1,382,920
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	672	652	903	1,125	9.37	23.3	545	569	22.9	143	166	20,976	1,239,590	1,260,565	2,169	138	2,902	1,358,925
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	695	673	696	1,355	7.53	18.7	427	446	18.1	112	130	20,976	1,044,895	1,065,871	2,166	114	3,153	1,157,278
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	127	123	127	247	1.37	3.41	78.0	81.4	3.31	20.4	23.7	3,473	172,994	176,467	359	18.9	522	191,601

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	165	154	668	1,129	8.70	10.1	545	556	9.64	143	152	—	910,201	910,201	10.5	112	801	944,730
Area	636	623	7.57	899	0.05	1.60	—	1.60	1.21	—	1.21	—	3,698	3,698	0.16	0.03	—	3,712
Energy	13.6	6.81	124	104	0.74	9.41	—	9.41	9.41	—	9.41	—	316,119	316,119	34.4	2.86	—	317,831
Water	—	—	—	—	—	—	—	—	—	—	—	9,163	19,672	28,835	942	22.6	—	59,129
Waste	—	—	—	—	—	—	—	—	—	—	—	11,813	0.00	11,813	1,181	0.00	—	41,329
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2,881	2,881
Stationary	28.5	25.9	72.5	66.1	0.12	3.81	0.00	3.81	3.81	0.00	3.81	0.00	13,264	13,264	0.53	0.10	0.00	13,309
Total	842	810	872	2,198	9.62	24.9	545	570	24.1	143	167	20,976	1,262,954	1,283,930	2,168	138	3,682	1,382,920
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	155	144	707	955	8.51	10.1	545	556	9.65	143	152	—	890,534	890,534	11.1	113	20.8	924,446
Area	475	475	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	13.6	6.81	124	104	0.74	9.41	—	9.41	9.41	—	9.41	—	316,119	316,119	34.4	2.86	—	317,831
Water	—	—	—	—	—	—	—	—	—	—	—	9,163	19,672	28,835	942	22.6	—	59,129
Waste	—	—	—	—	—	—	—	—	—	—	—	11,813	0.00	11,813	1,181	0.00	—	41,329
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2,881	2,881
Stationary	28.5	25.9	72.5	66.1	0.12	3.81	0.00	3.81	3.81	0.00	3.81	0.00	13,264	13,264	0.53	0.10	0.00	13,309
Total	672	652	903	1,125	9.37	23.3	545	569	22.9	143	166	20,976	1,239,590	1,260,565	2,169	138	2,902	1,358,925
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Mobile	123	114	559	799	6.74	7.95	427	435	7.59	112	119	—	705,463	705,463	8.88	88.9	272	732,455
Area	554	548	3.73	444	0.03	0.79	—	0.79	0.60	—	0.60	—	1,824	1,824	0.08	0.02	—	1,830
Energy	13.6	6.81	124	104	0.74	9.41	—	9.41	9.41	—	9.41	—	316,119	316,119	34.4	2.86	—	317,831
Water	—	—	—	—	—	—	—	—	—	—	—	9,163	19,672	28,835	942	22.6	—	59,129
Waste	—	—	—	—	—	—	—	—	—	—	—	11,813	0.00	11,813	1,181	0.00	—	41,329
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2,881	2,881
Stationary	3.90	3.55	9.93	9.06	0.02	0.52	0.00	0.52	0.52	0.00	0.52	0.00	1,817	1,817	0.07	0.01	0.00	1,823
Total	695	673	696	1,355	7.53	18.7	427	446	18.1	112	130	20,976	1,044,895	1,065,871	2,166	114	3,153	1,157,278
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	22.4	20.8	102	146	1.23	1.45	78.0	79.4	1.39	20.4	21.8	—	116,797	116,797	1.47	14.7	45.1	121,266
Area	101	100	0.68	80.9	< 0.005	0.14	—	0.14	0.11	—	0.11	—	302	302	0.01	< 0.005	—	303
Energy	2.48	1.24	22.6	19.0	0.14	1.72	—	1.72	1.72	—	1.72	—	52,337	52,337	5.69	0.47	—	52,621
Water	—	—	—	—	—	—	—	—	—	—	—	1,517	3,257	4,774	156	3.75	—	9,789
Waste	—	—	—	—	—	—	—	—	—	—	—	1,956	0.00	1,956	195	0.00	—	6,842
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	477	477
Stationary	0.71	0.65	1.81	1.65	< 0.005	0.10	0.00	0.10	0.10	0.00	0.10	0.00	301	301	0.01	< 0.005	0.00	302
Total	127	123	127	247	1.37	3.41	78.0	81.4	3.31	20.4	23.7	3,473	172,994	176,467	359	18.9	522	191,601

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 Park	7.88	6.36	243	70.0	2.64	3.69	125	129	3.53	33.5	37.1	—	278,932	278,932	0.97	41.5	258	291,595
Unrefrigerated Warehouse-No Rail	10.2	8.23	314	90.6	3.42	4.77	162	167	4.56	43.4	48.0	—	361,120	361,120	1.26	53.8	335	377,515
Refrigerated Warehouse-No Rail	2.79	2.32	69.0	24.2	0.73	1.10	38.6	39.7	1.05	10.4	11.4	—	76,919	76,919	0.28	11.1	91.9	80,330
User Defined Industrial	144	137	41.9	944	1.91	0.55	219	220	0.50	55.3	55.8	—	193,230	193,230	7.96	5.85	116	195,290
Total	165	154	668	1,129	8.70	10.1	545	556	9.64	143	152	—	910,201	910,201	10.5	112	801	944,730
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	7.42	5.95	256	71.2	2.64	3.69	125	129	3.53	33.5	37.1	—	279,102	279,102	0.95	41.6	6.70	291,524
Unrefrigerated Warehouse-No Rail	9.60	7.70	332	92.1	3.42	4.78	162	167	4.57	43.4	48.0	—	361,340	361,340	1.23	53.8	8.68	377,422
Refrigerated Warehouse-No Rail	2.65	2.20	72.8	24.5	0.73	1.10	38.6	39.7	1.05	10.4	11.4	—	76,967	76,967	0.28	11.1	2.38	80,291
User Defined Industrial	135	128	46.5	767	1.71	0.55	219	220	0.50	55.3	55.8	—	173,126	173,126	8.62	6.25	3.02	175,208

Total	155	144	707	955	8.51	10.1	545	556	9.65	143	152	—	890,534	890,534	11.1	113	20.8	924,446
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	1.22	0.99	41.0	11.2	0.42	0.59	19.9	20.5	0.56	5.32	5.88	—	40,404	40,404	0.14	6.02	16.2	42,217
Unrefrigerated Warehouse-No Rail	1.33	1.07	44.3	12.2	0.46	0.64	21.5	22.2	0.61	5.76	6.37	—	43,751	43,751	0.15	6.52	17.5	45,715
Refrigerated Warehouse-No Rail	0.36	0.30	9.74	3.24	0.10	0.15	5.12	5.26	0.14	1.37	1.51	—	9,312	9,312	0.03	1.35	4.80	9,719
User Defined Industrial	19.5	18.5	6.94	119	0.25	0.08	31.4	31.5	0.07	7.94	8.01	—	23,331	23,331	1.15	0.84	6.60	23,616
Total	22.4	20.8	102	146	1.23	1.45	78.0	79.4	1.39	20.4	21.8	—	116,797	116,797	1.47	14.7	45.1	121,266

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	—	—	—	—	—	—	—	—	—	—	—	—	105,312	105,312	13.3	1.62	—	106,126

Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	34,574	34,574	4.37	0.53	—	34,842
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	28,570	28,570	3.62	0.44	—	28,791
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	168,456	168,456	21.3	2.58	—	169,759
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	105,312	105,312	13.3	1.62	—	106,126
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	34,574	34,574	4.37	0.53	—	34,842
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	28,570	28,570	3.62	0.44	—	28,791
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	168,456	168,456	21.3	2.58	—	169,759
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	17,436	17,436	2.21	0.27	—	17,570

Unrefrig Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	5,724	5,724	0.72	0.09	—	5,768
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	4,730	4,730	0.60	0.07	—	4,767
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	27,890	27,890	3.53	0.43	—	28,106

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 Park	6.19	3.10	56.3	47.3	0.34	4.28	—	4.28	4.28	—	4.28	—	67,188	67,188	5.95	0.13	—	67,375
Unrefrigerated Warehouse-No Rail	5.89	2.94	53.5	45.0	0.32	4.07	—	4.07	4.07	—	4.07	—	63,871	63,871	5.65	0.12	—	64,048
Refrigerated Warehouse-No Rail	1.53	0.77	13.9	11.7	0.08	1.06	—	1.06	1.06	—	1.06	—	16,603	16,603	1.47	0.03	—	16,649
User Defined Industrial	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	13.6	6.81	124	104	0.74	9.41	—	9.41	9.41	—	9.41	—	147,663	147,663	13.1	0.28	—	148,072

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	6.19	3.10	56.3	47.3	0.34	4.28	—	4.28	4.28	—	4.28	—	67,188	67,188	5.95	0.13	—	67,375
Unrefrigerated Warehouse-No Rail	5.89	2.94	53.5	45.0	0.32	4.07	—	4.07	4.07	—	4.07	—	63,871	63,871	5.65	0.12	—	64,048
Refrigerated Warehouse-No Rail	1.53	0.77	13.9	11.7	0.08	1.06	—	1.06	1.06	—	1.06	—	16,603	16,603	1.47	0.03	—	16,649
User Defined Industrial	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	13.6	6.81	124	104	0.74	9.41	—	9.41	9.41	—	9.41	—	147,663	147,663	13.1	0.28	—	148,072
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	1.13	0.57	10.3	8.63	0.06	0.78	—	0.78	0.78	—	0.78	—	11,124	11,124	0.98	0.02	—	11,155
Unrefrigerated Warehouse-No Rail	1.07	0.54	9.77	8.21	0.06	0.74	—	0.74	0.74	—	0.74	—	10,575	10,575	0.94	0.02	—	10,604
Refrigerated Warehouse-No Rail	0.28	0.14	2.54	2.13	0.02	0.19	—	0.19	0.19	—	0.19	—	2,749	2,749	0.24	0.01	—	2,756
User Defined Industrial	0.00	0.00	0.00	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	1.24	22.6	19.0	0.14	1.72	—	1.72	1.72	—	1.72	—	24,447	24,447	2.16	0.05	—	24,515

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	443	443	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	32.8	32.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	160	148	7.57	899	0.05	1.60	—	1.60	1.21	—	1.21	—	3,698	3,698	0.16	0.03	—	3,712
Total	636	623	7.57	899	0.05	1.60	—	1.60	1.21	—	1.21	—	3,698	3,698	0.16	0.03	—	3,712
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	443	443	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	32.8	32.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	475	475	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Consumer Product	80.8	80.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	5.99	5.99	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	14.4	13.3	0.68	80.9	< 0.005	0.14	—	0.14	0.11	—	0.11	—	302	302	0.01	< 0.005	—	303
Total	101	100	0.68	80.9	< 0.005	0.14	—	0.14	0.11	—	0.11	—	302	302	0.01	< 0.005	—	303

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	—	—	—	—	—	—	—	—	—	—	—	3,665	7,869	11,534	377	9.05	—	23,652
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	4,582	9,836	14,418	471	11.3	—	29,564
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	916	1,967	2,884	94.2	2.26	—	5,913

User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	9,163	19,672	28,835	942	22.6	—	59,129
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	3,665	7,869	11,534	377	9.05	—	23,652
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	4,582	9,836	14,418	471	11.3	—	29,564
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	916	1,967	2,884	94.2	2.26	—	5,913
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	9,163	19,672	28,835	942	22.6	—	59,129
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	607	1,303	1,910	62.4	1.50	—	3,916
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	759	1,628	2,387	78.0	1.87	—	4,895
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	152	326	477	15.6	0.37	—	979

User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1,517	3,257	4,774	156	3.75	—	9,789

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	—	—	—	—	—	—	—	—	—	—	—	5,527	0.00	5,527	552	0.00	—	19,339
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	5,238	0.00	5,238	523	0.00	—	18,325
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	1,048	0.00	1,048	105	0.00	—	3,665
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	11,813	0.00	11,813	1,181	0.00	—	41,329
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Industrial Park	—	—	—	—	—	—	—	—	—	—	—	5,527	0.00	5,527	552	0.00	—	19,339
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	5,238	0.00	5,238	523	0.00	—	18,325
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	1,048	0.00	1,048	105	0.00	—	3,665
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	11,813	0.00	11,813	1,181	0.00	—	41,329
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	915	0.00	915	91.5	0.00	—	3,202
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	867	0.00	867	86.7	0.00	—	3,034
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	173	0.00	173	17.3	0.00	—	607
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1,956	0.00	1,956	195	0.00	—	6,842

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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	773	773
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2,108	2,108
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2,881	2,881
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	773	773
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2,108	2,108
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2,881	2,881
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	128	128

Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	349	349
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	477	477

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Fire Pump	10.8	9.85	27.5	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
Emergency Generator	17.7	16.1	44.9	41.0	0.08	2.37	0.00	2.37	2.37	0.00	2.37	0.00	8,227	8,227	0.33	0.06	0.00	8,255
Total	28.5	25.9	72.5	66.1	0.12	3.81	0.00	3.81	3.81	0.00	3.81	0.00	13,264	13,264	0.53	0.10	0.00	13,309
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Fire Pump	10.8	9.85	27.5	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
Emergency Generator	17.7	16.1	44.9	41.0	0.08	2.37	0.00	2.37	2.37	0.00	2.37	0.00	8,227	8,227	0.33	0.06	0.00	8,255
Total	28.5	25.9	72.5	66.1	0.12	3.81	0.00	3.81	3.81	0.00	3.81	0.00	13,264	13,264	0.53	0.10	0.00	13,309
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Fire Pump	0.27	0.25	0.69	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
Emergency Generator	0.44	0.40	1.12	1.03	< 0.005	0.06	0.00	0.06	0.06	0.00	0.06	0.00	187	187	0.01	< 0.005	0.00	187
Total	0.71	0.65	1.81	1.65	< 0.005	0.10	0.00	0.10	0.10	0.00	0.10	0.00	301	301	0.01	< 0.005	0.00	302

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	4,715	3,557	1,737	1,505,176	143,653	108,370	52,925	45,862,720
Unrefrigerated Warehouse-No Rail	3,102	274	109	828,602	94,508	8,348	3,308	25,247,493

Unrefrigerated Warehouse-No Rail	3,003	253	103	801,646	91,486	7,716	3,149	24,418,152
Refrigerated Warehouse-No Rail	1,553	130	51.7	414,355	44,289	3,715	1,474	11,817,396
User Defined Industrial	52,667	19,582	9,326	15,238,292	313,659	116,622	55,540	90,752,447

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	31,016,898	10,338,966	—

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

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	147,394,671	261	0.0330	0.0040	209,645,017
Unrefrigerated Warehouse-No Rail	24,195,057	261	0.0330	0.0040	99,647,710

Unrefrigerated Warehouse-No Rail	24,195,057	261	0.0330	0.0040	99,647,710
Refrigerated Warehouse-No Rail	39,987,109	261	0.0330	0.0040	51,806,573
User Defined Industrial	0.00	261	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	1,912,708,756	0.00
Unrefrigerated Warehouse-No Rail	1,195,442,944	0.00
Unrefrigerated Warehouse-No Rail	1,195,442,944	0.00
Refrigerated Warehouse-No Rail	478,177,131	0.00
User Defined Industrial	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Industrial Park	10,256	—
Unrefrigerated Warehouse-No Rail	4,859	—
Unrefrigerated Warehouse-No Rail	4,859	—
Refrigerated Warehouse-No Rail	1,944	—
User Defined Industrial	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	User Defined	750	0.30	4.00	4.00	18.0
Refrigerated Warehouse-No Rail	Cold storage	User Defined	150	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

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
Fire Pump	Diesel	20.0	1.00	50.0	300	0.73
Emergency Generator	Diesel	14.0	1.00	50.0	700	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	36.0	annual days of extreme heat
Extreme Precipitation	1.45	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	1.70	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	5	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	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	0	0	0	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	5	1	1	4
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
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	1	1	1	2

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	88.7
AQ-PM	5.81
AQ-DPM	4.06
Drinking Water	85.4
Lead Risk Housing	21.0
Pesticides	38.2
Toxic Releases	69.3
Traffic	8.11
Effect Indicators	—
CleanUp Sites	78.1
Groundwater	2.11
Haz Waste Facilities/Generators	88.6
Impaired Water Bodies	0.00
Solid Waste	75.7
Sensitive Population	—
Asthma	74.6

Cardio-vascular	53.5
Low Birth Weights	13.2
Socioeconomic Factor Indicators	—
Education	42.3
Housing	38.1
Linguistic	32.0
Poverty	61.8
Unemployment	26.9

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	67.56063134
Employed	13.29398178
Median HI	45.83600667
Education	—
Bachelor's or higher	38.31643783
High school enrollment	100
Preschool enrollment	48.45374054
Transportation	—
Auto Access	66.18760426
Active commuting	14.50019248
Social	—
2-parent households	65.622995
Voting	65.36635442
Neighborhood	—
Alcohol availability	88.70781471

Park access	23.43128449
Retail density	4.080585141
Supermarket access	30.32208392
Tree canopy	85.67945592
Housing	—
Homeownership	75.37533684
Housing habitability	76.05543436
Low-inc homeowner severe housing cost burden	38.73989478
Low-inc renter severe housing cost burden	63.54420634
Uncrowded housing	83.16437829
Health Outcomes	—
Insured adults	61.15744899
Arthritis	73.2
Asthma ER Admissions	41.1
High Blood Pressure	77.3
Cancer (excluding skin)	55.0
Asthma	43.1
Coronary Heart Disease	72.1
Chronic Obstructive Pulmonary Disease	62.6
Diagnosed Diabetes	68.9
Life Expectancy at Birth	4.1
Cognitively Disabled	94.6
Physically Disabled	49.3
Heart Attack ER Admissions	35.9
Mental Health Not Good	46.4
Chronic Kidney Disease	79.8
Obesity	42.9
Pedestrian Injuries	90.4

Physical Health Not Good	57.2
Stroke	70.4
Health Risk Behaviors	—
Binge Drinking	11.9
Current Smoker	43.1
No Leisure Time for Physical Activity	66.6
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	88.7
Elderly	25.8
English Speaking	89.3
Foreign-born	8.1
Outdoor Workers	46.5
Climate Change Adaptive Capacity	—
Impervious Surface Cover	93.4
Traffic Density	4.7
Traffic Access	23.0
Other Indices	—
Hardship	48.4
Other Decision Support	—
2016 Voting	51.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	46.0
Healthy Places Index Score for Project Location (b)	49.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No

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: Vehicle Data	Trip characteristics based on trip generation
Operations: Fleet Mix	Passenger Car Mix estimated based on CalEEMod default fleet mix and the ratio of the vehicle classes (LDA, LDT1, LDT2, MDV, MCY). Truck Fleet Mix based on 2, 3 and 4 axle trucks
Operations: Refrigerants	As of 1 January 2022, new commercial refrigeration equipment may not use refrigerants with a GWP of 150 or greater. Further, R-404A (the CalEEMod default) is unacceptable for new supermarket and cold storage systems as of 1 January 2019 and 2023, respectively. Beginning 1 January 2025, all new air conditioning equipment may not use refrigerants with a GWP of 750 or greater

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APPENDIX 4.6:

CALEEMOD ANNEXATION AREA OPERATIONAL EMISSIONS MODEL OUTPUTS - 2040

16126 AVCC Ops Annexation Area Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	16126 AVCC Ops Annexation Area
Operational Year	2040
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	5.00
Precipitation (days)	13.0
Location	34.75419785278483, -118.15724258295188
County	Los Angeles-Mojave Desert
City	Unincorporated
Air District	Antelope Valley AQMD
Air Basin	Mojave Desert
TAZ	3673
EDFZ	7
Electric Utility	Southern California Edison
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	5,793	1000sqft	133	5,793,480	0.00	—	—	—
Unrefrigerated Warehouse-No Rail	7,242	1000sqft	166	7,241,850	0.00	—	—	—

Refrigerated Warehouse-No Rail	1,448	1000sqft	33.2	1,448,370	0.00	—	—	—
User Defined Industrial	14,484	User Defined Unit	0.00	0.00	0.00	—	—	—
Single Family Housing	719	Dwelling Unit	233	1,402,050	8,421,544	—	2,128	—
Apartments Low Rise	683	Dwelling Unit	42.7	723,980	0.00	—	2,022	—
Mobile Home Park	435	Dwelling Unit	54.8	565,500	0.00	—	1,288	—
Office Park	1,111	1000sqft	25.5	1,110,780	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.	820	782	712	3,298	10.9	20.7	835	856	20.0	215	235	16,508	1,343,407	1,359,915	1,718	110	2,891	1,438,657
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	676	648	740	1,992	10.3	19.5	835	854	19.0	215	234	16,508	1,287,127	1,303,636	1,718	111	2,059	1,381,836
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unmit.	671	645	553	1,994	7.95	15.5	624	639	15.1	160	175	16,508	1,038,653	1,055,161	1,713	87.7	2,312	1,126,436
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	122	118	101	364	1.45	2.83	114	117	2.75	29.3	32.0	2,733	171,961	174,694	284	14.5	383	186,494

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	235	215	546	2,383	10.1	8.52	835	844	8.10	215	223	—	1,047,373	1,047,373	18.1	90.9	854	1,075,755
Area	552	542	6.67	783	0.04	1.25	—	1.25	0.95	—	0.95	—	3,068	3,068	0.13	0.03	—	3,079
Energy	11.9	5.95	107	84.8	0.65	8.23	—	8.23	8.23	—	8.23	—	268,186	268,186	29.0	2.38	—	269,620
Water	—	—	—	—	—	—	—	—	—	—	—	6,928	15,378	22,305	712	17.1	—	45,213
Waste	—	—	—	—	—	—	—	—	—	—	—	9,581	0.00	9,581	958	0.00	—	33,520
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2,037	2,037
Stationary	20.2	18.4	51.4	46.9	0.09	2.70	0.00	2.70	2.70	0.00	2.70	0.00	9,403	9,403	0.38	0.07	0.00	9,434
Total	820	782	712	3,298	10.9	20.7	835	856	20.0	215	235	16,508	1,343,407	1,359,915	1,718	110	2,891	1,438,657
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	222	202	582	1,860	9.60	8.52	835	844	8.10	215	223	—	994,161	994,161	18.7	91.8	22.1	1,022,013
Area	422	422	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	11.9	5.95	107	84.8	0.65	8.23	—	8.23	8.23	—	8.23	—	268,186	268,186	29.0	2.38	—	269,620
Water	—	—	—	—	—	—	—	—	—	—	—	6,928	15,378	22,305	712	17.1	—	45,213
Waste	—	—	—	—	—	—	—	—	—	—	—	9,581	0.00	9,581	958	0.00	—	33,520

Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2,037	2,037
Stationary	20.2	18.4	51.4	46.9	0.09	2.70	0.00	2.70	2.70	0.00	2.70	0.00	9,403	9,403	0.38	0.07	0.00	9,434
Total	676	648	740	1,992	10.3	19.5	835	854	19.0	215	234	16,508	1,287,127	1,303,636	1,718	111	2,059	1,381,836
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	170	155	435	1,516	7.27	6.31	624	630	6.00	160	166	—	752,288	752,288	14.4	68.2	276	773,236
Area	486	481	3.29	386	0.02	0.62	—	0.62	0.47	—	0.47	—	1,513	1,513	0.06	0.01	—	1,518
Energy	11.9	5.95	107	84.8	0.65	8.23	—	8.23	8.23	—	8.23	—	268,186	268,186	29.0	2.38	—	269,620
Water	—	—	—	—	—	—	—	—	—	—	—	6,928	15,378	22,305	712	17.1	—	45,213
Waste	—	—	—	—	—	—	—	—	—	—	—	9,581	0.00	9,581	958	0.00	—	33,520
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2,037	2,037
Stationary	2.77	2.52	7.04	6.42	0.01	0.37	0.00	0.37	0.37	0.00	0.37	0.00	1,288	1,288	0.05	0.01	0.00	1,292
Total	671	645	553	1,994	7.95	15.5	624	639	15.1	160	175	16,508	1,038,653	1,055,161	1,713	87.7	2,312	1,126,436
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	31.1	28.3	79.4	277	1.33	1.15	114	115	1.10	29.3	30.4	—	124,550	124,550	2.39	11.3	45.6	128,018
Area	88.7	87.8	0.60	70.5	< 0.005	0.11	—	0.11	0.09	—	0.09	—	250	250	0.01	< 0.005	—	251
Energy	2.17	1.09	19.6	15.5	0.12	1.50	—	1.50	1.50	—	1.50	—	44,401	44,401	4.81	0.39	—	44,639
Water	—	—	—	—	—	—	—	—	—	—	—	1,147	2,546	3,693	118	2.83	—	7,485
Waste	—	—	—	—	—	—	—	—	—	—	—	1,586	0.00	1,586	159	0.00	—	5,550
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	337	337
Stationary	0.50	0.46	1.28	1.17	< 0.005	0.07	0.00	0.07	0.07	0.00	0.07	0.00	213	213	0.01	< 0.005	0.00	214
Total	122	118	101	364	1.45	2.83	114	117	2.75	29.3	32.0	2,733	171,961	174,694	284	14.5	383	186,494

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 Park	54.8	50.4	22.3	605	1.35	0.35	159	159	0.32	40.1	40.4	—	137,072	137,072	4.00	2.98	84.3	138,143
Unrefrigerated Warehouse-No Rail	63.1	58.1	25.7	697	1.56	0.40	183	183	0.37	46.2	46.5	—	157,878	157,878	4.61	3.43	97.1	159,112
Refrigerated Warehouse-No Rail	6.70	6.17	2.73	74.0	0.17	0.04	19.4	19.4	0.04	4.90	4.94	—	16,767	16,767	0.49	0.36	10.3	16,898
User Defined Industrial	13.8	11.2	431	120	4.79	6.76	231	238	6.46	61.8	68.3	—	505,786	505,786	1.71	75.1	485	528,680
Single Family Housing	21.5	20.0	13.2	176	0.44	0.19	46.9	47.1	0.18	11.9	12.1	—	44,529	44,529	1.50	1.82	34.1	45,142
Apartments Low Rise	17.4	16.2	10.7	142	0.35	0.15	38.0	38.2	0.14	9.65	9.80	—	36,092	36,092	1.22	1.47	27.6	36,589
Mobile Home Park	9.72	9.03	5.95	79.3	0.20	0.09	21.2	21.3	0.08	5.38	5.46	—	20,112	20,112	0.68	0.82	15.4	20,389
Office Park	48.2	44.0	34.4	490	1.27	0.54	137	138	0.51	34.8	35.3	—	129,136	129,136	3.90	4.93	99.5	130,802

Total	235	215	546	2,383	10.1	8.52	835	844	8.10	215	223	—	1,047,37	1,047,37	18.1	90.9	854	1,075,75
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	51.8	47.5	25.0	461	1.21	0.35	159	159	0.32	40.1	40.4	—	122,483	122,483	4.15	3.21	2.19	123,547
Unrefrigerated Warehouse-No Rail	59.7	54.7	28.8	531	1.39	0.40	183	183	0.37	46.2	46.5	—	141,074	141,074	4.78	3.70	2.52	142,299
Refrigerated Warehouse-No Rail	6.34	5.81	3.06	56.4	0.15	0.04	19.4	19.4	0.04	4.90	4.94	—	14,982	14,982	0.51	0.39	0.27	15,112
User Defined Industrial	13.1	10.5	455	122	4.79	6.76	231	238	6.47	61.8	68.3	—	506,053	506,053	1.68	75.1	12.6	528,492
Single Family Housing	20.2	18.7	14.4	138	0.40	0.19	46.9	47.1	0.18	11.9	12.1	—	40,616	40,616	1.57	1.89	0.88	41,219
Apartments Low Rise	16.4	15.1	11.6	112	0.32	0.15	38.0	38.2	0.14	9.65	9.80	—	32,920	32,920	1.27	1.53	0.72	33,409
Mobile Home Park	9.12	8.43	6.48	62.5	0.18	0.09	21.2	21.3	0.08	5.38	5.46	—	18,345	18,345	0.71	0.85	0.40	18,617
Office Park	45.4	41.2	37.6	377	1.15	0.54	137	138	0.51	34.8	35.3	—	117,687	117,687	4.02	5.12	2.58	119,317
Total	222	202	582	1,860	9.60	8.52	835	844	8.10	215	223	—	994,161	994,161	18.7	91.8	22.1	1,022,013
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	6.83	6.26	3.42	65.7	0.16	0.05	20.8	20.8	0.04	5.24	5.29	—	15,068	15,068	0.50	0.39	4.36	15,202

Unrefrig Warehouse-No Rail	7.87	7.21	3.94	75.8	0.19	0.05	23.9	24.0	0.05	6.05	6.09	—	17,368	17,368	0.58	0.45	5.03	17,523
Refrigerated Warehouse-No Rail	0.84	0.77	0.42	8.10	0.02	0.01	2.56	2.56	0.01	0.65	0.65	—	1,857	1,857	0.06	0.05	0.54	1,873
User Defined Industrial	1.80	1.45	60.9	16.1	0.64	0.90	30.7	31.6	0.86	8.21	9.07	—	61,291	61,291	0.21	9.10	25.4	64,033
Single Family Housing	3.60	3.32	2.60	26.5	0.07	0.03	8.29	8.33	0.03	2.11	2.14	—	6,715	6,715	0.26	0.31	2.38	6,816
Apartments Low Rise	2.52	2.33	1.82	18.6	0.05	0.02	5.81	5.84	0.02	1.48	1.50	—	4,705	4,705	0.18	0.22	1.67	4,776
Mobile Home Park	1.48	1.37	1.07	10.9	0.03	0.01	3.42	3.43	0.01	0.87	0.88	—	2,769	2,769	0.11	0.13	0.98	2,810
Office Park	6.14	5.57	5.18	55.0	0.16	0.07	18.4	18.5	0.07	4.67	4.74	—	14,778	14,778	0.50	0.64	5.28	14,985
Total	31.1	28.3	79.4	277	1.33	1.15	114	115	1.10	29.3	30.4	—	124,550	124,550	2.39	11.3	45.6	128,018

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	—	—	—	—	—	—	—	—	—	—	—	—	73,765	73,765	9.33	1.13	—	74,335

Unrefrig Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	24,217	24,217	3.06	0.37	—	24,405
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	20,012	20,012	2.53	0.31	—	20,167
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	3,542	3,542	0.45	0.05	—	3,570
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	1,871	1,871	0.24	0.03	—	1,886
Mobile Home Park	—	—	—	—	—	—	—	—	—	—	—	—	1,490	1,490	0.19	0.02	—	1,501
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	14,143	14,143	1.79	0.22	—	14,252
Total	—	—	—	—	—	—	—	—	—	—	—	—	139,040	139,040	17.6	2.13	—	140,115
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	73,765	73,765	9.33	1.13	—	74,335
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	24,217	24,217	3.06	0.37	—	24,405

Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	20,012	20,012	2.53	0.31	—	20,167
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	3,542	3,542	0.45	0.05	—	3,570
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	1,871	1,871	0.24	0.03	—	1,886
Mobile Home Park	—	—	—	—	—	—	—	—	—	—	—	—	1,490	1,490	0.19	0.02	—	1,501
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	14,143	14,143	1.79	0.22	—	14,252
Total	—	—	—	—	—	—	—	—	—	—	—	—	139,040	139,040	17.6	2.13	—	140,115
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	12,213	12,213	1.55	0.19	—	12,307
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	4,009	4,009	0.51	0.06	—	4,040
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	3,313	3,313	0.42	0.05	—	3,339
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	586	586	0.07	0.01	—	591
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	310	310	0.04	< 0.005	—	312
Mobile Home Park	—	—	—	—	—	—	—	—	—	—	—	—	247	247	0.03	< 0.005	—	249
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	2,342	2,342	0.30	0.04	—	2,360
Total	—	—	—	—	—	—	—	—	—	—	—	—	23,020	23,020	2.91	0.35	—	23,198

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 Park	4.34	2.17	39.4	33.1	0.24	3.00	—	3.00	3.00	—	3.00	—	47,061	47,061	4.16	0.09	—	47,192
Unrefrigerated Warehouse-No Rail	4.12	2.06	37.5	31.5	0.22	2.85	—	2.85	2.85	—	2.85	—	44,738	44,738	3.96	0.08	—	44,862
Refrigerated Warehouse-No Rail	1.07	0.54	9.75	8.19	0.06	0.74	—	0.74	0.74	—	0.74	—	11,630	11,630	1.03	0.02	—	11,662
User Defined Industrial	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Single Family Housing	0.81	0.41	6.96	2.96	0.04	0.56	—	0.56	0.56	—	0.56	—	8,834	8,834	0.78	0.02	—	8,858
Apartments Low Rise	0.33	0.16	2.81	1.20	0.02	0.23	—	0.23	0.23	—	0.23	—	3,569	3,569	0.32	0.01	—	3,579
Mobile Home Park	0.40	0.20	3.38	1.44	0.02	0.27	—	0.27	0.27	—	0.27	—	4,291	4,291	0.38	0.01	—	4,303
Office Park	0.83	0.42	7.56	6.35	0.05	0.57	—	0.57	0.57	—	0.57	—	9,023	9,023	0.80	0.02	—	9,048
Total	11.9	5.95	107	84.8	0.65	8.23	—	8.23	8.23	—	8.23	—	129,146	129,146	11.4	0.24	—	129,504
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	4.34	2.17	39.4	33.1	0.24	3.00	—	3.00	3.00	—	3.00	—	47,061	47,061	4.16	0.09	—	47,192
Unrefrigerated Warehouse-No Rail	4.12	2.06	37.5	31.5	0.22	2.85	—	2.85	2.85	—	2.85	—	44,738	44,738	3.96	0.08	—	44,862
Refrigerated Warehouse-No Rail	1.07	0.54	9.75	8.19	0.06	0.74	—	0.74	0.74	—	0.74	—	11,630	11,630	1.03	0.02	—	11,662
User Defined Industrial	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Single Family Housing	0.81	0.41	6.96	2.96	0.04	0.56	—	0.56	0.56	—	0.56	—	8,834	8,834	0.78	0.02	—	8,858
Apartments Low Rise	0.33	0.16	2.81	1.20	0.02	0.23	—	0.23	0.23	—	0.23	—	3,569	3,569	0.32	0.01	—	3,579

Mobile Home Park	0.40	0.20	3.38	1.44	0.02	0.27	—	0.27	0.27	—	0.27	—	4,291	4,291	0.38	0.01	—	4,303
Office Park	0.83	0.42	7.56	6.35	0.05	0.57	—	0.57	0.57	—	0.57	—	9,023	9,023	0.80	0.02	—	9,048
Total	11.9	5.95	107	84.8	0.65	8.23	—	8.23	8.23	—	8.23	—	129,146	129,146	11.4	0.24	—	129,504
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	0.79	0.40	7.20	6.05	0.04	0.55	—	0.55	0.55	—	0.55	—	7,792	7,792	0.69	0.01	—	7,813
Unrefrigerated Warehouse-No Rail	0.75	0.38	6.84	5.75	0.04	0.52	—	0.52	0.52	—	0.52	—	7,407	7,407	0.66	0.01	—	7,427
Refrigerated Warehouse-No Rail	0.20	0.10	1.78	1.49	0.01	0.14	—	0.14	0.14	—	0.14	—	1,925	1,925	0.17	< 0.005	—	1,931
User Defined Industrial	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Single Family Housing	0.15	0.07	1.27	0.54	0.01	0.10	—	0.10	0.10	—	0.10	—	1,462	1,462	0.13	< 0.005	—	1,467
Apartments Low Rise	0.06	0.03	0.51	0.22	< 0.005	0.04	—	0.04	0.04	—	0.04	—	591	591	0.05	< 0.005	—	593
Mobile Home Park	0.07	0.04	0.62	0.26	< 0.005	0.05	—	0.05	0.05	—	0.05	—	710	710	0.06	< 0.005	—	712
Office Park	0.15	0.08	1.38	1.16	0.01	0.10	—	0.10	0.10	—	0.10	—	1,494	1,494	0.13	< 0.005	—	1,498
Total	2.17	1.09	19.6	15.5	0.12	1.50	—	1.50	1.50	—	1.50	—	21,382	21,382	1.89	0.04	—	21,441

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	391	391	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	30.5	30.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	130	121	6.67	783	0.04	1.25	—	1.25	0.95	—	0.95	—	3,068	3,068	0.13	0.03	—	3,079
Total	552	542	6.67	783	0.04	1.25	—	1.25	0.95	—	0.95	—	3,068	3,068	0.13	0.03	—	3,079
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	391	391	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	30.5	30.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	422	422	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Consumer Product	71.4	71.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	5.57	5.57	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	11.7	10.8	0.60	70.5	< 0.005	0.11	—	0.11	0.09	—	0.09	—	250	250	0.01	< 0.005	—	251
Total	88.7	87.8	0.60	70.5	< 0.005	0.11	—	0.11	0.09	—	0.09	—	250	250	0.01	< 0.005	—	251

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	—	—	—	—	—	—	—	—	—	—	—	2,567	5,512	8,079	264	6.34	—	16,567
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	3,209	6,890	10,099	330	7.92	—	20,708
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	642	1,378	2,020	66.0	1.58	—	4,142

User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	51.4	615	666	5.34	0.13	—	840
Apartme nts Low Rise	—	—	—	—	—	—	—	—	—	—	—	48.8	105	154	5.02	0.12	—	315
Mobile Home Park	—	—	—	—	—	—	—	—	—	—	—	31.1	66.7	97.8	3.19	0.08	—	200
Office Park	—	—	—	—	—	—	—	—	—	—	—	378	812	1,191	38.9	0.93	—	2,441
Total	—	—	—	—	—	—	—	—	—	—	—	6,928	15,378	22,305	712	17.1	—	45,213
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industria l Park	—	—	—	—	—	—	—	—	—	—	—	2,567	5,512	8,079	264	6.34	—	16,567
Unrefrig erated Wareho use-No Rail	—	—	—	—	—	—	—	—	—	—	—	3,209	6,890	10,099	330	7.92	—	20,708
Refriger ated Wareho use-No Rail	—	—	—	—	—	—	—	—	—	—	—	642	1,378	2,020	66.0	1.58	—	4,142
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	51.4	615	666	5.34	0.13	—	840

Apartments	—	—	—	—	—	—	—	—	—	—	—	48.8	105	154	5.02	0.12	—	315
Mobile Home Park	—	—	—	—	—	—	—	—	—	—	—	31.1	66.7	97.8	3.19	0.08	—	200
Office Park	—	—	—	—	—	—	—	—	—	—	—	378	812	1,191	38.9	0.93	—	2,441
Total	—	—	—	—	—	—	—	—	—	—	—	6,928	15,378	22,305	712	17.1	—	45,213
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	425	913	1,338	43.7	1.05	—	2,743
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	531	1,141	1,672	54.6	1.31	—	3,428
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	106	228	334	10.9	0.26	—	686
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	8.50	102	110	0.88	0.02	—	139
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	8.08	17.3	25.4	0.83	0.02	—	52.1
Mobile Home Park	—	—	—	—	—	—	—	—	—	—	—	5.14	11.0	16.2	0.53	0.01	—	33.2
Office Park	—	—	—	—	—	—	—	—	—	—	—	62.6	134	197	6.44	0.15	—	404
Total	—	—	—	—	—	—	—	—	—	—	—	1,147	2,546	3,693	118	2.83	—	7,485

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	—	—	—	—	—	—	—	—	—	—	—	3,872	0.00	3,872	387	0.00	—	13,546
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	3,669	0.00	3,669	367	0.00	—	12,836
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	734	0.00	734	73.3	0.00	—	2,567
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	304	0.00	304	30.4	0.00	—	1,064
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	272	0.00	272	27.2	0.00	—	952
Mobile Home Park	—	—	—	—	—	—	—	—	—	—	—	173	0.00	173	17.3	0.00	—	607
Office Park	—	—	—	—	—	—	—	—	—	—	—	557	0.00	557	55.6	0.00	—	1,948

Total	—	—	—	—	—	—	—	—	—	—	—	9,581	0.00	9,581	958	0.00	—	33,520
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	3,872	0.00	3,872	387	0.00	—	13,546
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	3,669	0.00	3,669	367	0.00	—	12,836
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	734	0.00	734	73.3	0.00	—	2,567
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	304	0.00	304	30.4	0.00	—	1,064
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	272	0.00	272	27.2	0.00	—	952
Mobile Home Park	—	—	—	—	—	—	—	—	—	—	—	173	0.00	173	17.3	0.00	—	607
Office Park	—	—	—	—	—	—	—	—	—	—	—	557	0.00	557	55.6	0.00	—	1,948
Total	—	—	—	—	—	—	—	—	—	—	—	9,581	0.00	9,581	958	0.00	—	33,520
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	641	0.00	641	64.1	0.00	—	2,243

Unrefrigerated	—	—	—	—	—	—	—	—	—	—	—	607	0.00	607	60.7	0.00	—	2,125
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	121	0.00	121	12.1	0.00	—	425
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	50.4	0.00	50.4	5.03	0.00	—	176
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	45.1	0.00	45.1	4.50	0.00	—	158
Mobile Home Park	—	—	—	—	—	—	—	—	—	—	—	28.7	0.00	28.7	2.87	0.00	—	100
Office Park	—	—	—	—	—	—	—	—	—	—	—	92.2	0.00	92.2	9.21	0.00	—	322
Total	—	—	—	—	—	—	—	—	—	—	—	1,586	0.00	1,586	159	0.00	—	5,550

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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	542	542

Refriger Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,476	1,476
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8.98	8.98
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4.64	4.64
Mobile Home Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.62	3.62
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.59	1.59
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2,037	2,037
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	542	542
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,476	1,476
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8.98	8.98
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4.64	4.64
Mobile Home Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.62	3.62
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.59	1.59

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2,037	2,037
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	89.7	89.7
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	244	244
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.49	1.49
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.77	0.77
Mobile Home Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.60	0.60
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.26	0.26
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	337	337

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Fire Pump	7.57	6.89	19.3	17.6	0.03	1.01	0.00	1.01	1.01	0.00	1.01	0.00	3,526	3,526	0.14	0.03	0.00	3,538
Emergency Generator	12.6	11.5	32.1	29.3	0.06	1.69	0.00	1.69	1.69	0.00	1.69	0.00	5,877	5,877	0.24	0.05	0.00	5,896
Total	20.2	18.4	51.4	46.9	0.09	2.70	0.00	2.70	2.70	0.00	2.70	0.00	9,403	9,403	0.38	0.07	0.00	9,434
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Fire Pump	7.57	6.89	19.3	17.6	0.03	1.01	0.00	1.01	1.01	0.00	1.01	0.00	3,526	3,526	0.14	0.03	0.00	3,538
Emergency Generator	12.6	11.5	32.1	29.3	0.06	1.69	0.00	1.69	1.69	0.00	1.69	0.00	5,877	5,877	0.24	0.05	0.00	5,896
Total	20.2	18.4	51.4	46.9	0.09	2.70	0.00	2.70	2.70	0.00	2.70	0.00	9,403	9,403	0.38	0.07	0.00	9,434

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Fire Pump	0.19	0.17	0.48	0.44	< 0.005	0.03	0.00	0.03	0.03	0.00	0.03	0.00	80.0	80.0	< 0.005	< 0.005	0.00	80.2
Emergency Generator	0.32	0.29	0.80	0.73	< 0.005	0.04	0.00	0.04	0.04	0.00	0.04	0.00	133	133	0.01	< 0.005	0.00	134
Total	0.50	0.46	1.28	1.17	< 0.005	0.07	0.00	0.07	0.07	0.00	0.07	0.00	213	213	0.01	< 0.005	0.00	214

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	16,222	724	290	4,282,106	227,149	10,141	4,056	59,961,242
Unrefrigerated Warehouse-No Rail	18,684	884	355	4,935,750	261,627	12,372	4,969	69,114,055
Refrigerated Warehouse-No Rail	1,984	140	56.5	527,598	27,785	1,967	791	7,387,817
User Defined Industrial	7,575	666	261	2,023,238	264,745	23,285	9,112	70,712,182
Single Family Housing	6,780	6,859	6,147	2,445,894	65,457	66,220	59,348	23,613,005
Apartments Low Rise	4,604	5,560	4,289	1,713,903	44,449	53,673	41,409	16,546,261
Mobile Home Park	3,098	2,005	1,844	1,008,448	29,909	19,360	17,806	9,735,699
Office Park	13,818	1,822	844	3,741,583	193,491	25,509	11,821	52,392,438

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)
5450348.25	1,816,783	23,391,720	7,797,240	—

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

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	103,241,472	261	0.0330	0.0040	146,844,252
Unrefrigerated Warehouse-No Rail	33,894,487	261	0.0330	0.0040	139,594,959
Refrigerated Warehouse-No Rail	28,008,668	261	0.0330	0.0040	36,287,523
User Defined Industrial	0.00	261	0.0330	0.0040	0.00
Single Family Housing	4,957,609	261	0.0330	0.0040	27,563,114
Apartments Low Rise	2,619,336	261	0.0330	0.0040	11,136,776
Mobile Home Park	2,085,044	261	0.0330	0.0040	13,389,247
Office Park	19,794,418	261	0.0330	0.0040	28,154,349

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Industrial Park	1,339,742,250	0.00
Unrefrigerated Warehouse-No Rail	1,674,677,813	0.00
Refrigerated Warehouse-No Rail	334,935,563	0.00

User Defined Industrial	0.00	0.00
Single Family Housing	26,799,862	166,584,921
Apartments Low Rise	25,458,005	0.00
Mobile Home Park	16,214,103	0.00
Office Park	197,423,093	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Industrial Park	7,184	—
Unrefrigerated Warehouse-No Rail	6,807	—
Refrigerated Warehouse-No Rail	1,361	—
User Defined Industrial	0.00	—
Single Family Housing	565	—
Apartments Low Rise	505	—
Mobile Home Park	322	—
Office Park	1,033	—

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	User Defined	750	0.30	4.00	4.00	18.0
Refrigerated Warehouse-No Rail	Cold storage	User Defined	150	7.50	7.50	7.50	25.0
Single Family Housing	Average room A/C & Other residential A/C and heat pumps	User Defined	750	< 0.005	2.50	2.50	10.0

Single Family Housing	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
Apartments Low Rise	Average room A/C & Other residential A/C and heat pumps	User Defined	750	< 0.005	2.50	2.50	10.0
Apartments Low Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
Mobile Home Park	Average room A/C & Other residential A/C and heat pumps	User Defined	750	< 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
Office Park	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
Office Park	Other commercial A/C and heat pumps	User Defined	750	< 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
Fire Pump	Diesel	14.0	1.00	50.0	300	0.73
Emergency Generator	Diesel	10.0	1.00	50.0	700	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	36.0	annual days of extreme heat
Extreme Precipitation	1.45	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	1.70	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	5	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	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	0	0	0	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	5	1	1	4
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
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	1	1	1	2

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	88.7
AQ-PM	5.81
AQ-DPM	4.06
Drinking Water	85.4
Lead Risk Housing	21.0

Pesticides	38.2
Toxic Releases	69.3
Traffic	8.11
Effect Indicators	—
CleanUp Sites	78.1
Groundwater	2.11
Haz Waste Facilities/Generators	88.6
Impaired Water Bodies	0.00
Solid Waste	75.7
Sensitive Population	—
Asthma	74.6
Cardio-vascular	53.5
Low Birth Weights	13.2
Socioeconomic Factor Indicators	—
Education	42.3
Housing	38.1
Linguistic	32.0
Poverty	61.8
Unemployment	26.9

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	67.56063134
Employed	13.29398178
Median HI	45.83600667
Education	—

Bachelor's or higher	38.31643783
High school enrollment	100
Preschool enrollment	48.45374054
Transportation	—
Auto Access	66.18760426
Active commuting	14.50019248
Social	—
2-parent households	65.622995
Voting	65.36635442
Neighborhood	—
Alcohol availability	88.70781471
Park access	23.43128449
Retail density	4.080585141
Supermarket access	30.32208392
Tree canopy	85.67945592
Housing	—
Homeownership	75.37533684
Housing habitability	76.05543436
Low-inc homeowner severe housing cost burden	38.73989478
Low-inc renter severe housing cost burden	63.54420634
Uncrowded housing	83.16437829
Health Outcomes	—
Insured adults	61.15744899
Arthritis	73.2
Asthma ER Admissions	41.1
High Blood Pressure	77.3
Cancer (excluding skin)	55.0
Asthma	43.1

Coronary Heart Disease	72.1
Chronic Obstructive Pulmonary Disease	62.6
Diagnosed Diabetes	68.9
Life Expectancy at Birth	4.1
Cognitively Disabled	94.6
Physically Disabled	49.3
Heart Attack ER Admissions	35.9
Mental Health Not Good	46.4
Chronic Kidney Disease	79.8
Obesity	42.9
Pedestrian Injuries	90.4
Physical Health Not Good	57.2
Stroke	70.4
Health Risk Behaviors	—
Binge Drinking	11.9
Current Smoker	43.1
No Leisure Time for Physical Activity	66.6
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	88.7
Elderly	25.8
English Speaking	89.3
Foreign-born	8.1
Outdoor Workers	46.5
Climate Change Adaptive Capacity	—
Impervious Surface Cover	93.4
Traffic Density	4.7

Traffic Access	23.0
Other Indices	—
Hardship	48.4
Other Decision Support	—
2016 Voting	51.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	46.0
Healthy Places Index Score for Project Location (b)	49.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
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: Vehicle Data	Trip characteristics based on Project transportation assessment.
Operations: Fleet Mix	Fleet mix adjusted to separate passenger vehicles and trucks.
Operations: Hearths	Project will not use wood stoves, fireplaces, or natural gas.

Operations: Energy Use	The Project will not use natural gas.
Operations: Refrigerants	Beginning 1 January 2025, all new air conditioning equipment may not use refrigerants with a GWP of 750 or greater. As of 1 January 2022, new commercial refrigeration equipment may not use refrigerants with a GWP of 150 or greater.

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APPENDIX 4.6:

TRU EMISSION CALCULATIONS

TRU Emissions - PAs 2, 4, 6 East, 7, 8 (2031)

2031	Year
Los Angeles (MD)	Region

Transport Refrigeration Unit - Instate Trailer

205	No. of Units
4	Hours/day

Total Two-Way TRU Trips per day
756

Transport Refrigeration Unit - Instate Truck

173	No. of Units
4	Hours/day

	Activity (hrs/year)
Transport Refrigeration Unit - Instate Trailer	214,238
Transport Refrigeration Unit - Instate Truck	0

Unit		Emission Factor						
		ROG	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$	CO_2
Transport Refrigeration Unit - Instate Trailer	Emissions (tons/day)	2.82E-02	2.58E-02	3.07E-03	0.00E+00	2.43E-04	2.24E-04	4.61E+00
	Emissions (lbs/hr)	9.62E-02	8.79E-02	1.05E-02	0.00E+00	8.29E-04	7.62E-04	1.57E+01
Transport Refrigeration Unit - Instate Truck	Emissions (tons/day)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Emissions (lbs/hr)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

Unit	Emissions (lbs/day)						MT/yr
	ROG	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$	CO_2
Transport Refrigeration Unit - Instate Trailer	78.90	72.08	8.59	0.00	0.68	0.62	2,134.26
Transport Refrigeration Unit - Instate Truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	78.90	72.08	8.59	0.00	0.68	0.62	2,134.26

TRU Emissions - PAs 2, 4, 6 East, 7, 8 (2040)

2040	Year
Los Angeles (MD)	Region

Transport Refrigeration Unit - Instate Trailer

205	No. of Units
4	Hours/day

Total Two-Way TRU Trips per day
756

Transport Refrigeration Unit - Instate Truck

173	No. of Units
4	Hours/day

	Activity (hrs/year)
Transport Refrigeration Unit - Instate Trailer	247,138
Transport Refrigeration Unit - Instate Truck	0

Unit		Emission Factor						
		ROG	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$	CO_2
Transport Refrigeration Unit - Instate Trailer	Emissions (tons/day)	3.25E-02	2.97E-02	3.54E-03	0.00E+00	1.94E-04	1.78E-04	5.31E+00
	Emissions (lbs/hr)	9.61E-02	8.77E-02	1.05E-02	0.00E+00	5.72E-04	5.26E-04	1.57E+01
Transport Refrigeration Unit - Instate Truck	Emissions (tons/day)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Emissions (lbs/hr)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

Unit	Emissions (lbs/day)						MT/yr
	ROG	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$	CO_2
Transport Refrigeration Unit - Instate Trailer	78.78	71.94	8.58	0.00	0.47	0.43	2,130.18
Transport Refrigeration Unit - Instate Truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	78.78	71.94	8.58	0.00	0.47	0.43	2,130.18

TRU Emissions - Annexation Area (2040)

2040	Year
Los Angeles (MD)	Region

Transport Refrigeration Unit - Instate Trailer

295	No. of Units
4	Hours/day

Total Two-Way TRU Trips per day
1,088

Transport Refrigeration Unit - Instate Truck

249	No. of Units
4	Hours/day

	Activity (hrs/year)
Transport Refrigeration Unit - Instate Trailer	247,138
Transport Refrigeration Unit - Instate Truck	0

Unit		Emission Factor						
		ROG	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$	CO_2
Transport Refrigeration Unit - Instate Trailer	Emissions (tons/day)	3.25E-02	2.97E-02	3.54E-03	0.00E+00	1.94E-04	1.78E-04	5.31E+00
	Emissions (lbs/hr)	9.61E-02	8.77E-02	1.05E-02	0.00E+00	5.72E-04	5.26E-04	1.57E+01
Transport Refrigeration Unit - Instate Truck	Emissions (tons/day)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Emissions (lbs/hr)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

Unit	Emissions (lbs/day)						MT/yr
	ROG	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$	CO_2
Transport Refrigeration Unit - Instate Trailer	113.37	103.52	12.34	0.00	0.67	0.62	3,065.38
Transport Refrigeration Unit - Instate Truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	113.37	103.52	12.34	0.00	0.67	0.62	3,065.38

TRU Emissions - PAs 1, 3, 5 (2040)

2040	Year
Los Angeles (MD)	Region

Transport Refrigeration Unit - Instate Trailer

421	No. of Units
4	Hours/day

Total Two-Way TRU Trips per day
1,552

Transport Refrigeration Unit - Instate Truck

355	No. of Units
4	Hours/day

	Activity (hrs/year)
Transport Refrigeration Unit - Instate Trailer	247,138
Transport Refrigeration Unit - Instate Truck	0

Unit		Emission Factor						
		ROG	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$	CO_2
Transport Refrigeration Unit - Instate Trailer	Emissions (tons/day)	3.25E-02	2.97E-02	3.54E-03	0.00E+00	1.94E-04	1.78E-04	5.31E+00
	Emissions (lbs/hr)	9.61E-02	8.77E-02	1.05E-02	0.00E+00	5.72E-04	5.26E-04	1.57E+01
Transport Refrigeration Unit - Instate Truck	Emissions (tons/day)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Emissions (lbs/hr)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

Unit	Emissions (lbs/day)						MT/yr
	ROG	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$	CO_2
Transport Refrigeration Unit - Instate Trailer	161.80	147.74	17.62	0.00	0.96	0.89	4,374.66
Transport Refrigeration Unit - Instate Truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	161.80	147.74	17.62	0.00	0.96	0.89	4,374.66

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APPENDIX 4.7:

EMFAC2021 EMISSIONS INVENTORY

Source: EMFAC2021 (v1.0.2) Emissions Inventory
Region Type: Sub-Area
Region: Los Angeles (MD)
Calendar Year: 2026
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/day for CVMT and EVMT, trips/day for Trips, kWh/day for Energy Consumption, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	endar Yehicle Catego	Model Year	Speed	Fuel	Population	Total VMT	Fuel_Consumption	Fuel_Consumption	Total Fuel	VMT	Total VMT	Miles per Gallon	Vehicle Class
Los Angeles (MD)	2026	HHDT	Aggregate	Aggregate	Gasoline	0.049514262	25.25866888	0.004890866	4.890866054	38901.51183	25.25866888	258271.4479	6.64	HHDT
Los Angeles (MD)	2026	HHDT	Aggregate	Aggregate	Diesel	1496.549366	255428.8266	38.8013841	38801.3841		255428.8266			
Los Angeles (MD)	2026	HHDT	Aggregate	Aggregate	Electricity	15.27453953	2305.945863	0	0		2305.945863			
Los Angeles (MD)	2026	HHDT	Aggregate	Aggregate	Natural Gas	6.659462092	511.4167011	0.095236862	95.2368622		511.4167011			
Los Angeles (MD)	2026	LDA	Aggregate	Aggregate	Gasoline	74794.7127	3919089.45	127.2090788	127209.0788	129495.894	3919089.45	4235703.202	32.71	LDA
Los Angeles (MD)	2026	LDA	Aggregate	Aggregate	Diesel	255.109527	11665.95614	0.256946269	256.9462689		11665.95614			
Los Angeles (MD)	2026	LDA	Aggregate	Aggregate	Electricity	3252.65973	179283.3156	0	0		179283.3156			
Los Angeles (MD)	2026	LDA	Aggregate	Aggregate	Plug-in Hybric	2147.810436	125664.4805	2.029868907	2029.868907		125664.4805			
Los Angeles (MD)	2026	LDT1	Aggregate	Aggregate	Gasoline	5925.025287	263358.2984	10.33714931	10337.14931	10349.97928	263358.2984	264858.4025	25.59	LDT1
Los Angeles (MD)	2026	LDT1	Aggregate	Aggregate	Diesel	2.918639122	60.99948563	0.002405605	2.405604518		60.99948563			
Los Angeles (MD)	2026	LDT1	Aggregate	Aggregate	Electricity	12.74785565	710.0315372	0	0		710.0315372			
Los Angeles (MD)	2026	LDT1	Aggregate	Aggregate	Plug-in Hybric	11.43283008	729.0731292	0.01042436	10.42435977		729.0731292			
Los Angeles (MD)	2026	LDT2	Aggregate	Aggregate	Gasoline	24473.85313	1274788.08	50.08905143	50089.05143	50422.79075	1274788.08	1302401.473	25.83	LDT2
Los Angeles (MD)	2026	LDT2	Aggregate	Aggregate	Diesel	74.0921266	4190.895088	0.115788541	115.7885409		4190.895088			
Los Angeles (MD)	2026	LDT2	Aggregate	Aggregate	Electricity	220.8089483	8843.582995	0	0		8843.582995			
Los Angeles (MD)	2026	LDT2	Aggregate	Aggregate	Plug-in Hybric	236.7845677	14578.91458	0.217950781	217.9507813		14578.91458			
Los Angeles (MD)	2026	LHDT1	Aggregate	Aggregate	Gasoline	2417.148451	95516.02416	6.86672589	6866.72589	10884.66535	95516.02416	184460.0999	16.95	LHDT1
Los Angeles (MD)	2026	LHDT1	Aggregate	Aggregate	Diesel	2195.879992	86365.47171	4.017939458	4017.939458		86365.47171			
Los Angeles (MD)	2026	LHDT1	Aggregate	Aggregate	Electricity	34.2797026	2578.604055	0	0		2578.604055			
Los Angeles (MD)	2026	LHDT2	Aggregate	Aggregate	Gasoline	331.7081228	13160.68948	1.039909085	1039.909085	3258.484608	13160.68948	53394.71997	16.39	LHDT2
Los Angeles (MD)	2026	LHDT2	Aggregate	Aggregate	Diesel	990.7191257	39599.11978	2.218575523	2218.575523		39599.11978			
Los Angeles (MD)	2026	LHDT2	Aggregate	Aggregate	Electricity	8.876243578	634.910707	0	0		634.910707			
Los Angeles (MD)	2026	MCY	Aggregate	Aggregate	Gasoline	3862.630739	22797.72018	0.5420694	542.0694	542.0694	22797.72018	22797.72018	42.06	MCY
Los Angeles (MD)	2026	MDV	Aggregate	Aggregate	Gasoline	19461.69072	929202.8233	45.7258093	45725.8093	46472.04203	929202.8233	963523.8002	20.73	MDV
Los Angeles (MD)	2026	MDV	Aggregate	Aggregate	Diesel	315.1947826	15162.24707	0.597617032	597.617032		15162.24707			
Los Angeles (MD)	2026	MDV	Aggregate	Aggregate	Electricity	238.4336658	9528.603726	0	0		9528.603726			
Los Angeles (MD)	2026	MDV	Aggregate	Aggregate	Plug-in Hybric	160.8109331	9630.126031	0.148615699	148.6156991		9630.126031			
Los Angeles (MD)	2026	MH	Aggregate	Aggregate	Gasoline	740.2155418	6736.676121	1.356083482	1356.083482	1600.28398	6736.676121	9268.427175	5.79	MH
Los Angeles (MD)	2026	MH	Aggregate	Aggregate	Diesel	277.3419302	2531.751054	0.244200498	244.2004981		2531.751054			
Los Angeles (MD)	2026	MHDT	Aggregate	Aggregate	Gasoline	144.7983774	15912.92975	2.890248016	2890.248016	12075.48391	15912.92975	104714.8645	8.67	MHDT
Los Angeles (MD)	2026	MHDT	Aggregate	Aggregate	Diesel	1724.966911	86614.06531	9.132134908	9132.134908		86614.06531			
Los Angeles (MD)	2026	MHDT	Aggregate	Aggregate	Electricity	25.31015821	1704.21252	0	0		1704.21252			
Los Angeles (MD)	2026	MHDT	Aggregate	Aggregate	Natural Gas	9.791150792	483.6568715	0.053100986	53.10098583		483.6568715			
Los Angeles (MD)	2026	OBUS	Aggregate	Aggregate	Gasoline	48.00271124	3680.528062	0.702778049	702.7780494	1192.016632	3680.528062	7230.181548	6.07	OBUS
Los Angeles (MD)	2026	OBUS	Aggregate	Aggregate	Diesel	46.15828939	3479.998265	0.489238582	489.2385823		3479.998265			
Los Angeles (MD)	2026	OBUS	Aggregate	Aggregate	Electricity	0.413076135	69.65522086	0	0		69.65522086			
Los Angeles (MD)	2026	SBUS	Aggregate	Aggregate	Gasoline	51.62424704	5272.801367	0.555416971	555.4169709	1783.938906	5272.801367	14204.20697	7.96	SBUS
Los Angeles (MD)	2026	SBUS	Aggregate	Aggregate	Diesel	360.4079846	8076.89953	1.054847269	1054.847269		8076.89953			
Los Angeles (MD)	2026	SBUS	Aggregate	Aggregate	Electricity	3.927356677	115.1007605	0	0		115.1007605			
Los Angeles (MD)	2026	SBUS	Aggregate	Aggregate	Natural Gas	30.65014671	739.4053095	0.173674666	173.674666		739.4053095			
Los Angeles (MD)	2026	UBUS	Aggregate	Aggregate	Diesel	29.27119024	5007.086649	0.764723765	764.7237649	2386.585545	5007.086649	12303.5656	5.16	UBUS
Los Angeles (MD)	2026	UBUS	Aggregate	Aggregate	Electricity	32.29924441	2425.276922	0	0		2425.276922			
Los Angeles (MD)	2026	UBUS	Aggregate	Aggregate	Natural Gas	33.90438904	4871.202029	1.62186178	1621.86178		4871.202029			

Source: EMFAC2021 (v1.0.2) Emissions Inventory
Region Type: Sub-Area
Region: Los Angeles (MD)
Calendar Year: 2027
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/day for CVMT and EVMT, trips/day for Trips, kWh/day for Energy Consumption, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	endar Y	hicle Catego	Model Year	Speed	Fuel	Population	Total VMT	Fuel_Consumption	Fuel_Consumption	Total Fuel	VMT	Total VMT	Miles per Gallon	Vehicle Class
Los Angeles (MD)	2027	HHDT	Aggregate	Aggregate	Gasoline	0.059198906	29.09291366	0.005619974	5.619974382	38672.7879	29.09291366	262954.5976	6.80	HHDT
Los Angeles (MD)	2027	HHDT	Aggregate	Aggregate	Diesel	1522.889694	258724.023	38.57480805	38574.80805		258724.023			
Los Angeles (MD)	2027	HHDT	Aggregate	Aggregate	Electricity	24.32299253	3704.596146	0	0		3704.596146			
Los Angeles (MD)	2027	HHDT	Aggregate	Aggregate	Natural Gas	6.52731503	496.8855297	0.092359879	92.35987948		496.8855297			
Los Angeles (MD)	2027	LDA	Aggregate	Aggregate	Gasoline	73880.04169	3906002.232	124.9927663	124992.7663	127364.0445	3906002.232	4251294.09	33.38	LDA
Los Angeles (MD)	2027	LDA	Aggregate	Aggregate	Diesel	233.1322815	10749.64006	0.235551121	235.5511212		10749.64006			
Los Angeles (MD)	2027	LDA	Aggregate	Aggregate	Electricity	3674.381135	201781.4483	0	0		201781.4483			
Los Angeles (MD)	2027	LDA	Aggregate	Aggregate	Plug-in Hybric	2265.037129	132760.7703	2.135727134	2135.727134		132760.7703			
Los Angeles (MD)	2027	LDT1	Aggregate	Aggregate	Gasoline	5698.934574	256308.2979	9.934806288	9934.806288	9949.013812	256308.2979	258193.7061	25.95	LDT1
Los Angeles (MD)	2027	LDT1	Aggregate	Aggregate	Diesel	1.074633678	23.56133797	0.000884898	0.884897821		23.56133797			
Los Angeles (MD)	2027	LDT1	Aggregate	Aggregate	Electricity	16.45312397	930.6450146	0	0		930.6450146			
Los Angeles (MD)	2027	LDT1	Aggregate	Aggregate	Plug-in Hybric	14.55914893	931.2018352	0.013322626	13.3226263		931.2018352			
Los Angeles (MD)	2027	LDT2	Aggregate	Aggregate	Gasoline	24443.17641	1290420.786	49.69798595	49697.98595	50064.4379	1290420.786	1322007.856	26.41	LDT2
Los Angeles (MD)	2027	LDT2	Aggregate	Aggregate	Diesel	76.88990498	4365.228397	0.119107111	119.1071111		4365.228397			
Los Angeles (MD)	2027	LDT2	Aggregate	Aggregate	Electricity	266.4028551	10648.46351	0	0		10648.46351			
Los Angeles (MD)	2027	LDT2	Aggregate	Aggregate	Plug-in Hybric	269.0767914	16573.37875	0.247344834	247.3448336		16573.37875			
Los Angeles (MD)	2027	LHDT1	Aggregate	Aggregate	Gasoline	2331.992338	93687.02464	6.616936839	6616.936839	10543.4435	93687.02464	182397.0076	17.30	LHDT1
Los Angeles (MD)	2027	LHDT1	Aggregate	Aggregate	Diesel	2133.387976	84396.81026	3.926506658	3926.506658		84396.81026			
Los Angeles (MD)	2027	LHDT1	Aggregate	Aggregate	Electricity	58.2559452	4313.172741	0	0		4313.172741			
Los Angeles (MD)	2027	LHDT2	Aggregate	Aggregate	Gasoline	322.9646074	12955.28469	1.010001577	1010.001577	3187.328799	12955.28469	52945.56986	16.61	LHDT2
Los Angeles (MD)	2027	LHDT2	Aggregate	Aggregate	Diesel	973.0148023	38924.4282	2.177327222	2177.327222		38924.4282			
Los Angeles (MD)	2027	LHDT2	Aggregate	Aggregate	Electricity	15.13314367	1065.856964	0	0		1065.856964			
Los Angeles (MD)	2027	MCY	Aggregate	Aggregate	Gasoline	3798.305692	22506.75852	0.534945811	534.9458108	534.9458108	22506.75852	22506.75852	42.07	MCY
Los Angeles (MD)	2027	MDV	Aggregate	Aggregate	Gasoline	18897.90883	915075.5993	44.23300204	44233.00204	44969.7834	915075.5993	951846.6024	21.17	MDV
Los Angeles (MD)	2027	MDV	Aggregate	Aggregate	Diesel	303.9197126	14624.26463	0.57037651	570.3765101		14624.26463			
Los Angeles (MD)	2027	MDV	Aggregate	Aggregate	Electricity	283.5597265	11299.12173	0	0		11299.12173			
Los Angeles (MD)	2027	MDV	Aggregate	Aggregate	Plug-in Hybric	180.8688672	10847.61673	0.16640485	166.40485		10847.61673			
Los Angeles (MD)	2027	MH	Aggregate	Aggregate	Gasoline	688.5803158	6306.690183	1.272772666	1272.772666	1512.206203	6306.690183	8779.493962	5.81	MH
Los Angeles (MD)	2027	MH	Aggregate	Aggregate	Diesel	269.9796295	2472.80378	0.239433538	239.4335377		2472.80378			
Los Angeles (MD)	2027	MHDT	Aggregate	Aggregate	Gasoline	141.8475757	16021.30164	2.881589605	2881.589605	12060.38973	16021.30164	106286.3049	8.81	MHDT
Los Angeles (MD)	2027	MHDT	Aggregate	Aggregate	Diesel	1751.084979	86920.77683	9.12428768	9124.28768		86920.77683			
Los Angeles (MD)	2027	MHDT	Aggregate	Aggregate	Electricity	42.98413223	2852.751722	0	0		2852.751722			
Los Angeles (MD)	2027	MHDT	Aggregate	Aggregate	Natural Gas	10.29523619	491.4747199	0.054512446	54.51244578		491.4747199			
Los Angeles (MD)	2027	OBUS	Aggregate	Aggregate	Gasoline	45.83537349	3529.119655	0.67049147	670.4914701	1158.489336	3529.119655	7132.630715	6.16	OBUS
Los Angeles (MD)	2027	OBUS	Aggregate	Aggregate	Diesel	47.20667994	3492.82787	0.487997866	487.9978662		3492.82787			
Los Angeles (MD)	2027	OBUS	Aggregate	Aggregate	Electricity	0.655956518	110.6831904	0	0		110.6831904			
Los Angeles (MD)	2027	SBUS	Aggregate	Aggregate	Gasoline	51.95549721	5368.808444	0.564430804	564.4308036	1781.435128	5368.808444	14312.85814	8.03	SBUS
Los Angeles (MD)	2027	SBUS	Aggregate	Aggregate	Diesel	356.0704619	7990.611869	1.038592088	1038.592088		7990.611869			
Los Angeles (MD)	2027	SBUS	Aggregate	Aggregate	Electricity	6.448104265	188.9323373	0	0		188.9323373			
Los Angeles (MD)	2027	SBUS	Aggregate	Aggregate	Natural Gas	31.98206367	764.5054916	0.178412236	178.4122355		764.5054916			
Los Angeles (MD)	2027	UBUS	Aggregate	Aggregate	Diesel	8.074811102	1430.192269	0.252263588	252.2635883	2893.409045	1430.192269	12328.29959	4.26	UBUS
Los Angeles (MD)	2027	UBUS	Aggregate	Aggregate	Electricity	35.64632272	2988.899311	0	0		2988.899311			
Los Angeles (MD)	2027	UBUS	Aggregate	Aggregate	Natural Gas	51.94562396	7909.208013	2.641145457	2641.145457		7909.208013			

Source: EMFAC2021 (v1.0.2) Emissions Inventory
Region Type: Sub-Area
Region: Los Angeles (MD)
Calendar Year: 2028
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/day for CVMT and EVMT, trips/day for Trips, kWh/day for Energy Consumption, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	endar Vhicle Catego		Model Year	Speed	Fuel	Population	Total VMT	Fuel_Consumption	Fuel_Consumption	Total Fuel	VMT	Total VMT	Miles per Gallon	Vehicle Class
Los Angeles (MD)	2028	HHDT	Aggregate	Aggregate	Gasoline	0.069114025	32.60397126	0.006279561	6.279561306	38360.66324	32.60397126	267740.2248	6.98	HHDT
Los Angeles (MD)	2028	HHDT	Aggregate	Aggregate	Diesel	1544.616643	261652.2203	38.26442772	38264.42772		261652.2203			
Los Angeles (MD)	2028	HHDT	Aggregate	Aggregate	Electricity	36.53100883	5564.834007	0	0		5564.834007			
Los Angeles (MD)	2028	HHDT	Aggregate	Aggregate	Natural Gas	6.418478452	490.5665024	0.089955963	89.95596318		490.5665024			
Los Angeles (MD)	2028	LDA	Aggregate	Aggregate	Gasoline	72975.19632	3890270.222	122.2993999	122299.3999	124718.7099	3890270.222	4262748.766	34.18	LDA
Los Angeles (MD)	2028	LDA	Aggregate	Aggregate	Diesel	213.9603812	9853.812172	0.214177395	214.1773948		9853.812172			
Los Angeles (MD)	2028	LDA	Aggregate	Aggregate	Electricity	4087.121851	223490.5005	0	0		223490.5005			
Los Angeles (MD)	2028	LDA	Aggregate	Aggregate	Plug-in Hybric	2371.831519	139134.2316	2.205132579	2205.132579		139134.2316			
Los Angeles (MD)	2028	LDT1	Aggregate	Aggregate	Gasoline	5489.189888	249613.4585	9.517281235	9517.281235	9534.310046	249613.4585	251975.2409	26.43	LDT1
Los Angeles (MD)	2028	LDT1	Aggregate	Aggregate	Diesel	0.733806862	16.34599685	0.000598434	0.598433645		16.34599685			
Los Angeles (MD)	2028	LDT1	Aggregate	Aggregate	Electricity	20.77201639	1187.368562	0	0		1187.368562			
Los Angeles (MD)	2028	LDT1	Aggregate	Aggregate	Plug-in Hybric	18.06544319	1158.067848	0.016430377	16.43037712		1158.067848			
Los Angeles (MD)	2028	LDT2	Aggregate	Aggregate	Gasoline	24452.47946	1306100.663	49.20968956	49209.68956	49605.85397	1306100.663	1341839.285	27.05	LDT2
Los Angeles (MD)	2028	LDT2	Aggregate	Aggregate	Diesel	79.29712896	4516.595999	0.121345625	121.3456246		4516.595999			
Los Angeles (MD)	2028	LDT2	Aggregate	Aggregate	Electricity	315.8703768	12598.95711	0	0		12598.95711			
Los Angeles (MD)	2028	LDT2	Aggregate	Aggregate	Plug-in Hybric	302.403162	18623.06908	0.274818784	274.8187837		18623.06908			
Los Angeles (MD)	2028	LHDT1	Aggregate	Aggregate	Gasoline	2251.703742	91723.28133	6.342940905	6342.940905	10158.47139	91723.28133	180581.7886	17.78	LHDT1
Los Angeles (MD)	2028	LHDT1	Aggregate	Aggregate	Diesel	2068.844452	82231.42706	3.81553048	3815.53048		82231.42706			
Los Angeles (MD)	2028	LHDT1	Aggregate	Aggregate	Electricity	90.79634107	6627.080242	0	0		6627.080242			
Los Angeles (MD)	2028	LHDT2	Aggregate	Aggregate	Gasoline	314.4741898	12722.21018	0.974822349	974.8223492	3100.475684	12722.21018	52537.00205	16.94	LHDT2
Los Angeles (MD)	2028	LHDT2	Aggregate	Aggregate	Diesel	954.5666021	38171.51031	2.125653335	2125.653335		38171.51031			
Los Angeles (MD)	2028	LHDT2	Aggregate	Aggregate	Electricity	23.66082356	1643.281562	0	0		1643.281562			
Los Angeles (MD)	2028	MCY	Aggregate	Aggregate	Gasoline	3735.281871	22240.66453	0.526381252	526.3812521	526.3812521	22240.66453	22240.66453	42.25	MCY
Los Angeles (MD)	2028	MDV	Aggregate	Aggregate	Gasoline	18384.29115	902132.2193	42.69205271	42692.05271	43414.1831	902132.2193	941333.8029	21.68	MDV
Los Angeles (MD)	2028	MDV	Aggregate	Aggregate	Diesel	291.4221767	14053.12959	0.540120309	540.1203088		14053.12959			
Los Angeles (MD)	2028	MDV	Aggregate	Aggregate	Electricity	329.950795	13104.23904	0	0		13104.23904			
Los Angeles (MD)	2028	MDV	Aggregate	Aggregate	Plug-in Hybric	200.6607737	12044.21494	0.182010082	182.0100819		12044.21494			
Los Angeles (MD)	2028	MH	Aggregate	Aggregate	Gasoline	639.6374735	5903.343665	1.19115135	1191.15135	1425.06953	5903.343665	8318.449308	5.84	MH
Los Angeles (MD)	2028	MH	Aggregate	Aggregate	Diesel	262.8539626	2415.105643	0.23391818	233.91818		2415.105643			
Los Angeles (MD)	2028	MHDT	Aggregate	Aggregate	Gasoline	138.6765224	16029.46226	2.850671249	2850.671249	11960.57163	16029.46226	107899.827	9.02	MHDT
Los Angeles (MD)	2028	MHDT	Aggregate	Aggregate	Diesel	1768.14702	86802.9705	9.053938256	9053.938256		86802.9705			
Los Angeles (MD)	2028	MHDT	Aggregate	Aggregate	Electricity	69.43017069	4564.113412	0	0		4564.113412			
Los Angeles (MD)	2028	MHDT	Aggregate	Aggregate	Natural Gas	10.92734651	503.2808736	0.05596213	55.96212964		503.2808736			
Los Angeles (MD)	2028	OBUS	Aggregate	Aggregate	Gasoline	44.26339641	3390.255231	0.637342627	637.3426272	1121.870542	3390.255231	7068.049781	6.30	OBUS
Los Angeles (MD)	2028	OBUS	Aggregate	Aggregate	Diesel	48.08149465	3504.856249	0.484527915	484.5279145		3504.856249			
Los Angeles (MD)	2028	OBUS	Aggregate	Aggregate	Electricity	1.021983679	172.9383006	0	0		172.9383006			
Los Angeles (MD)	2028	SBUS	Aggregate	Aggregate	Gasoline	52.16758605	5448.059609	0.571721383	571.721383	1772.467787	5448.059609	14411.29097	8.13	SBUS
Los Angeles (MD)	2028	SBUS	Aggregate	Aggregate	Diesel	350.1681666	7872.392977	1.01818631	1018.18631		7872.392977			
Los Angeles (MD)	2028	SBUS	Aggregate	Aggregate	Electricity	10.32143483	304.1115012	0	0		304.1115012			
Los Angeles (MD)	2028	SBUS	Aggregate	Aggregate	Natural Gas	33.23343417	786.726886	0.182560094	182.5600935		786.726886			
Los Angeles (MD)	2028	UBUS	Aggregate	Aggregate	Diesel	8.074811102	1430.192269	0.252263588	252.2635883	2899.603667	1430.192269	12353.03359	4.26	UBUS
Los Angeles (MD)	2028	UBUS	Aggregate	Aggregate	Electricity	35.69430624	2995.082809	0	0		2995.082809			
Los Angeles (MD)	2028	UBUS	Aggregate	Aggregate	Natural Gas	52.08957452	7927.758508	2.647340079	2647.340079		7927.758508			

Source: EMFAC2021 (v1.0.2) Emissions Inventory
Region Type: Sub-Area
Region: Los Angeles (MD)
Calendar Year: 2029
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/day for CVMT and EVMT, trips/day for Trips, kWh/day for Energy Consumption, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	endar \	hicle Catego	Model Year	Speed	Fuel	Population	Total VMT	Fuel_Consumption	Fuel_Consumption	Total Fuel	VMT	Total VMT	Miles per Gallon	Vehicle Class
Los Angeles (MD)	2029	HHDT	Aggregate	Aggregate	Gasoline	0.07893511	35.6748405	0.006850566	6.850566	38036.28397	35.6748405	272616.3153	7.17	HHDT
Los Angeles (MD)	2029	HHDT	Aggregate	Aggregate	Diesel	1560.887389	264252.5979	37.9410372	37941.0372		264252.5979			
Los Angeles (MD)	2029	HHDT	Aggregate	Aggregate	Electricity	51.59653782	7837.50597	0	0		7837.50597			
Los Angeles (MD)	2029	HHDT	Aggregate	Aggregate	Natural Gas	6.308433921	490.5366095	0.088396202	88.396202		490.5366095			
Los Angeles (MD)	2029	LDA	Aggregate	Aggregate	Gasoline	72037.08917	3871445.74	119.6408007	119640.8007	122095.3154	3871445.74	4269747.889	34.97	LDA
Los Angeles (MD)	2029	LDA	Aggregate	Aggregate	Diesel	191.79797	8928.964763	0.192170233	192.170233		8928.964763			
Los Angeles (MD)	2029	LDA	Aggregate	Aggregate	Electricity	4494.839358	244667.9988	0	0		244667.9988			
Los Angeles (MD)	2029	LDA	Aggregate	Aggregate	Plug-in Hybric	2465.842268	144705.1859	2.262344425	2262.344425		144705.1859			
Los Angeles (MD)	2029	LDT1	Aggregate	Aggregate	Gasoline	5292.488925	243423.2432	9.129864157	9129.864157	9150.133984	243423.2432	246326.497	26.92	LDT1
Los Angeles (MD)	2029	LDT1	Aggregate	Aggregate	Diesel	0.456809371	10.5205771	0.000383203	0.383203		10.5205771			
Los Angeles (MD)	2029	LDT1	Aggregate	Aggregate	Electricity	25.75342634	1482.4129	0	0		1482.4129			
Los Angeles (MD)	2029	LDT1	Aggregate	Aggregate	Plug-in Hybric	21.95891907	1410.320337	0.019886624	19.886624		1410.320337			
Los Angeles (MD)	2029	LDT2	Aggregate	Aggregate	Gasoline	24487.18449	1321804.55	48.81211058	48812.11058	49238.30644	1321804.55	1361868.105	27.66	LDT2
Los Angeles (MD)	2029	LDT2	Aggregate	Aggregate	Diesel	81.4810385	4656.254508	0.123317252	123.317252		4656.254508			
Los Angeles (MD)	2029	LDT2	Aggregate	Aggregate	Electricity	369.0931375	14689.58526	0	0		14689.58526			
Los Angeles (MD)	2029	LDT2	Aggregate	Aggregate	Plug-in Hybric	336.5385616	20717.71529	0.302878607	302.878607		20717.71529			
Los Angeles (MD)	2029	LHDT1	Aggregate	Aggregate	Gasoline	2171.087385	89577.08226	6.072985485	6072.985485	9773.7163	89577.08226	179010.2918	18.32	LHDT1
Los Angeles (MD)	2029	LHDT1	Aggregate	Aggregate	Diesel	2002.93722	79950.42633	3.700730815	3700.730815		79950.42633			
Los Angeles (MD)	2029	LHDT1	Aggregate	Aggregate	Electricity	131.7487375	9482.783217	0	0		9482.783217			
Los Angeles (MD)	2029	LHDT2	Aggregate	Aggregate	Gasoline	306.1025366	12467.02887	0.940128528	940.128528	3011.67148	12467.02887	52186.55814	17.33	LHDT2
Los Angeles (MD)	2029	LHDT2	Aggregate	Aggregate	Diesel	935.4502843	37360.08862	2.071542952	2071.542952		37360.08862			
Los Angeles (MD)	2029	LHDT2	Aggregate	Aggregate	Electricity	34.44050261	2359.44064	0	0		2359.44064			
Los Angeles (MD)	2029	MCY	Aggregate	Aggregate	Gasoline	3685.674292	22014.73823	0.51912598	519.12598	519.12598	22014.73823	22014.73823	42.41	MCY
Los Angeles (MD)	2029	MDV	Aggregate	Aggregate	Gasoline	17915.73053	890566.1435	41.29178393	41291.78393	41999.35282	890566.1435	932225.6994	22.20	MDV
Los Angeles (MD)	2029	MDV	Aggregate	Aggregate	Diesel	277.420365	13475.24582	0.509783381	509.783381		13475.24582			
Los Angeles (MD)	2029	MDV	Aggregate	Aggregate	Electricity	377.3996081	14936.35729	0	0		14936.35729			
Los Angeles (MD)	2029	MDV	Aggregate	Aggregate	Plug-in Hybric	220.7137148	13247.95286	0.197785506	197.785506		13247.95286			
Los Angeles (MD)	2029	MH	Aggregate	Aggregate	Gasoline	593.4907591	5528.938569	1.115342122	1115.342122	1343.799917	5528.938569	7886.902415	5.87	MH
Los Angeles (MD)	2029	MH	Aggregate	Aggregate	Diesel	255.6673368	2357.963846	0.228457795	228.457795		2357.963846			
Los Angeles (MD)	2029	MHDT	Aggregate	Aggregate	Gasoline	135.3160443	15930.7488	2.804207277	2804.207277	11797.04605	15930.7488	109550.2631	9.29	MHDT
Los Angeles (MD)	2029	MHDT	Aggregate	Aggregate	Diesel	1774.308222	86237.44637	8.936972361	8936.972361		86237.44637			
Los Angeles (MD)	2029	MHDT	Aggregate	Aggregate	Electricity	105.6101922	6880.990289	0	0		6880.990289			
Los Angeles (MD)	2029	MHDT	Aggregate	Aggregate	Natural Gas	11.27419225	501.0776267	0.055866409	55.866409		501.0776267			
Los Angeles (MD)	2029	OBUS	Aggregate	Aggregate	Gasoline	42.73356092	3247.514686	0.604534928	604.534928	1085.4372	3247.514686	7020.718301	6.47	OBUS
Los Angeles (MD)	2029	OBUS	Aggregate	Aggregate	Diesel	48.61961089	3516.535651	0.480902272	480.902272		3516.535651			
Los Angeles (MD)	2029	OBUS	Aggregate	Aggregate	Electricity	1.513605296	256.6679633	0	0		256.6679633			
Los Angeles (MD)	2029	SBUS	Aggregate	Aggregate	Gasoline	52.24654192	5510.598779	0.577273071	577.273071	1756.649963	5510.598779	14499.59257	8.25	SBUS
Los Angeles (MD)	2029	SBUS	Aggregate	Aggregate	Diesel	342.8936453	7719.915223	0.993472237	993.472237		7719.915223			
Los Angeles (MD)	2029	SBUS	Aggregate	Aggregate	Electricity	15.6672925	464.0688055	0	0		464.0688055			
Los Angeles (MD)	2029	SBUS	Aggregate	Aggregate	Natural Gas	34.3638825	805.0097613	0.185904655	185.904655		805.0097613			
Los Angeles (MD)	2029	UBUS	Aggregate	Aggregate	Diesel	8.074811102	1430.192269	0.252263588	252.263588	2928.558827	1430.192269	12377.76758	4.23	UBUS
Los Angeles (MD)	2029	UBUS	Aggregate	Aggregate	Electricity	34.22826268	2933.107308	0	0		2933.107308			
Los Angeles (MD)	2029	UBUS	Aggregate	Aggregate	Natural Gas	53.74755217	8014.468002	2.676295239	2676.295239		8014.468002			

Source: EMFAC2021 (v1.0.2) Emissions Inventory
Region Type: Sub-Area
Region: Los Angeles (MD)
Calendar Year: 2030
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/day for CVMT and EVMT, trips/day for Trips, kWh/day for Energy Consumption, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	endar Y	hicle Catego	Model Year	Speed	Fuel	Population	Total VMT	Fuel_Consumption	Fuel_Consumption	Total Fuel	VMT	Total VMT	Miles per Gallon	Vehicle Class
Los Angeles (MD)	2030	HHDT	Aggregate	Aggregate	Gasoline	0.088303762	38.19172191	0.007310927	7.310927263	37721.41692	38.19172191	277584.4622	7.36	HHDT
Los Angeles (MD)	2030	HHDT	Aggregate	Aggregate	Diesel	1572.251991	266563.2212	37.62598798	37625.98798		266563.2212			
Los Angeles (MD)	2030	HHDT	Aggregate	Aggregate	Electricity	69.31093768	10484.52916	0	0		10484.52916			
Los Angeles (MD)	2030	HHDT	Aggregate	Aggregate	Natural Gas	6.236439762	498.5200667	0.088118011	88.11801128		498.5200667			
Los Angeles (MD)	2030	LDA	Aggregate	Aggregate	Gasoline	71088.60697	3850155.022	117.0508836	117050.8836	119530.8567	3850155.022	4273223.271	35.75	LDA
Los Angeles (MD)	2030	LDA	Aggregate	Aggregate	Diesel	172.8279708	8056.28725	0.171778604	171.7786044		8056.28725			
Los Angeles (MD)	2030	LDA	Aggregate	Aggregate	Electricity	4900.010042	265504.4345	0	0		265504.4345			
Los Angeles (MD)	2030	LDA	Aggregate	Aggregate	Plug-in Hybric	2547.883637	149507.5266	2.308194493	2308.194493		149507.5266			
Los Angeles (MD)	2030	LDT1	Aggregate	Aggregate	Gasoline	5108.117417	237628.0301	8.768862154	8768.862154	8792.757055	237628.0301	241141.5735	27.43	LDT1
Los Angeles (MD)	2030	LDT1	Aggregate	Aggregate	Diesel	0.219225568	5.563480197	0.00019998	0.199980457		5.563480197			
Los Angeles (MD)	2030	LDT1	Aggregate	Aggregate	Electricity	31.45961716	1819.791383	0	0		1819.791383			
Los Angeles (MD)	2030	LDT1	Aggregate	Aggregate	Plug-in Hybric	26.24819749	1688.188574	0.02369492	23.6949196		1688.188574			
Los Angeles (MD)	2030	LDT2	Aggregate	Aggregate	Gasoline	24529.73206	1336649.981	48.45939823	48459.39823	48915.61657	1336649.981	1381209.135	28.24	LDT2
Los Angeles (MD)	2030	LDT2	Aggregate	Aggregate	Diesel	83.34816788	4778.341671	0.124858223	124.8582232		4778.341671			
Los Angeles (MD)	2030	LDT2	Aggregate	Aggregate	Electricity	426.4400079	16933.81623	0	0		16933.81623			
Los Angeles (MD)	2030	LDT2	Aggregate	Aggregate	Plug-in Hybric	371.3660476	22846.99601	0.331360119	331.3601189		22846.99601			
Los Angeles (MD)	2030	LHDT1	Aggregate	Aggregate	Gasoline	2090.56642	87249.55632	5.806707916	5806.707916	9388.800753	87249.55632	177658.2954	18.92	LHDT1
Los Angeles (MD)	2030	LHDT1	Aggregate	Aggregate	Diesel	1937.316972	77561.65632	3.582092838	3582.092838		77561.65632			
Los Angeles (MD)	2030	LHDT1	Aggregate	Aggregate	Electricity	180.9528896	12847.08275	0	0		12847.08275			
Los Angeles (MD)	2030	LHDT2	Aggregate	Aggregate	Gasoline	297.4557566	12181.92151	0.904952032	904.9520316	2917.927861	12181.92151	51844.7199	17.77	LHDT2
Los Angeles (MD)	2030	LHDT2	Aggregate	Aggregate	Diesel	914.5993908	36455.63105	2.01297583	2012.97583		36455.63105			
Los Angeles (MD)	2030	LHDT2	Aggregate	Aggregate	Electricity	47.44484708	3207.167336	0	0		3207.167336			
Los Angeles (MD)	2030	MCY	Aggregate	Aggregate	Gasoline	3630.336713	21804.98276	0.512134251	512.1342509	512.1342509	21804.98276	21804.98276	42.58	MCY
Los Angeles (MD)	2030	MDV	Aggregate	Aggregate	Gasoline	17501.95119	880541.7428	40.04092212	40040.92212	40737.91638	880541.7428	924766.4719	22.70	MDV
Los Angeles (MD)	2030	MDV	Aggregate	Aggregate	Diesel	266.1222728	12973.93871	0.483563166	483.563166		12973.93871			
Los Angeles (MD)	2030	MDV	Aggregate	Aggregate	Electricity	426.2221526	16808.18032	0	0		16808.18032			
Los Angeles (MD)	2030	MDV	Aggregate	Aggregate	Plug-in Hybric	240.7125107	14442.61003	0.213431098	213.4310978		14442.61003			
Los Angeles (MD)	2030	MH	Aggregate	Aggregate	Gasoline	551.3947692	5189.688386	1.046710973	1046.710973	1269.908186	5189.688386	7492.630434	5.90	MH
Los Angeles (MD)	2030	MH	Aggregate	Aggregate	Diesel	248.6709415	2302.942048	0.223197213	223.1972134		2302.942048			
Los Angeles (MD)	2030	MHDT	Aggregate	Aggregate	Gasoline	131.8367068	15715.85491	2.741092413	2741.092413	11568.50621	15715.85491	111224.0437	9.61	MHDT
Los Angeles (MD)	2030	MHDT	Aggregate	Aggregate	Diesel	1769.898613	85216.89085	8.77170296	8771.70296		85216.89085			
Los Angeles (MD)	2030	MHDT	Aggregate	Aggregate	Electricity	151.399279	9793.208182	0	0		9793.208182			
Los Angeles (MD)	2030	MHDT	Aggregate	Aggregate	Natural Gas	11.62810496	498.0897197	0.055710833	55.71083336		498.0897197			
Los Angeles (MD)	2030	OBUS	Aggregate	Aggregate	Gasoline	41.14924888	3095.380676	0.570977837	570.9778373	1049.276946	3095.380676	6983.749438	6.66	OBUS
Los Angeles (MD)	2030	OBUS	Aggregate	Aggregate	Diesel	48.97045954	3527.885373	0.478299109	478.299109		3527.885373			
Los Angeles (MD)	2030	OBUS	Aggregate	Aggregate	Electricity	2.124795271	360.4833881	0	0		360.4833881			
Los Angeles (MD)	2030	SBUS	Aggregate	Aggregate	Gasoline	52.16126996	5551.951781	0.580583124	580.5831239	1734.3972	5551.951781	14573.35213	8.40	SBUS
Los Angeles (MD)	2030	SBUS	Aggregate	Aggregate	Diesel	335.0570621	7542.983858	0.966004593	966.0045933		7542.983858			
Los Angeles (MD)	2030	SBUS	Aggregate	Aggregate	Electricity	22.12196548	661.8314397	0	0		661.8314397			
Los Angeles (MD)	2030	SBUS	Aggregate	Aggregate	Natural Gas	35.26557462	816.5850483	0.187809483	187.8094826		816.5850483			
Los Angeles (MD)	2030	UBUS	Aggregate	Aggregate	Electricity	42.49500787	4388.03357	0	0	2676.295239	4388.03357	12402.50157	4.63	UBUS
Los Angeles (MD)	2030	UBUS	Aggregate	Aggregate	Natural Gas	53.74755217	8014.468002	2.676295239	2676.295239		8014.468002			

Source: EMFAC2021 (v1.0.2) Emissions Inventory
Region Type: Sub-Area
Region: Los Angeles (MD)
Calendar Year: 2031
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/day for CVMT and EVMT, trips/day for Trips, kWh/day for Energy Consumption, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	endar Y	hicle Catego	Model Year	Speed	Fuel	Population	Total VMT	Fuel_Consumption	Fuel_Consumption	Total Fuel	VMT	Total VMT	Miles per Gallon	Vehicle Class
Los Angeles (MD)	2031	HHDT	Aggregate	Aggregate	Gasoline	0.097262424	40.29515104	0.007690349	7.690348565	37888.8383	40.29515104	286322.8377	7.56	HHDT
Los Angeles (MD)	2031	HHDT	Aggregate	Aggregate	Diesel	1588.456609	272117.2517	37.79075232	37790.75232		272117.2517			
Los Angeles (MD)	2031	HHDT	Aggregate	Aggregate	Electricity	90.15915472	13642.29277	0	0		13642.29277			
Los Angeles (MD)	2031	HHDT	Aggregate	Aggregate	Natural Gas	6.150227596	522.9980689	0.090395625	90.39562465		522.9980689			
Los Angeles (MD)	2031	LDA	Aggregate	Aggregate	Gasoline	70154.6607	3827523.446	114.5635704	114563.5704	117060.0617	3827523.446	4273748.607	36.51	LDA
Los Angeles (MD)	2031	LDA	Aggregate	Aggregate	Diesel	155.860346	7225.544868	0.152634941	152.6349407		7225.544868			
Los Angeles (MD)	2031	LDA	Aggregate	Aggregate	Electricity	5293.968734	285363.6648	0	0		285363.6648			
Los Angeles (MD)	2031	LDA	Aggregate	Aggregate	Plug-in Hybric	2618.974585	153635.952	2.343856356	2343.856356		153635.952			
Los Angeles (MD)	2031	LDT1	Aggregate	Aggregate	Gasoline	4934.741795	232281.7541	8.435259902	8435.259902	8462.821241	232281.7541	236388.902	27.93	LDT1
Los Angeles (MD)	2031	LDT1	Aggregate	Aggregate	Diesel	0.203307367	5.208413675	0.000186299	0.186299222		5.208413675			
Los Angeles (MD)	2031	LDT1	Aggregate	Aggregate	Electricity	37.06795934	2145.112223	0	0		2145.112223			
Los Angeles (MD)	2031	LDT1	Aggregate	Aggregate	Plug-in Hybric	30.44068093	1956.827249	0.027375041	27.37504052		1956.827249			
Los Angeles (MD)	2031	LDT2	Aggregate	Aggregate	Gasoline	24571.80369	1350500.059	48.14003301	48140.03301	48624.18049	1350500.059	1399299.121	28.78	LDT2
Los Angeles (MD)	2031	LDT2	Aggregate	Aggregate	Diesel	84.99410191	4887.504453	0.126124981	126.1249812		4887.504453			
Los Angeles (MD)	2031	LDT2	Aggregate	Aggregate	Electricity	481.8851329	19060.6978	0	0		19060.6978			
Los Angeles (MD)	2031	LDT2	Aggregate	Aggregate	Plug-in Hybric	404.4790276	24850.85912	0.358022502	358.0225023		24850.85912			
Los Angeles (MD)	2031	LHDT1	Aggregate	Aggregate	Gasoline	2013.892244	84802.85512	5.550358043	5550.358043	9009.85232	84802.85512	176554.9477	19.60	LHDT1
Los Angeles (MD)	2031	LHDT1	Aggregate	Aggregate	Diesel	1870.964322	75062.86128	3.459494277	3459.494277		75062.86128			
Los Angeles (MD)	2031	LHDT1	Aggregate	Aggregate	Electricity	238.2142211	16689.23131	0	0		16689.23131			
Los Angeles (MD)	2031	LHDT2	Aggregate	Aggregate	Gasoline	287.7447959	11847.01624	0.867273793	867.2737927	2819.288919	11847.01624	51519.39621	18.27	LHDT2
Los Angeles (MD)	2031	LHDT2	Aggregate	Aggregate	Diesel	893.0483314	35493.0524	1.952015126	1952.015126		35493.0524			
Los Angeles (MD)	2031	LHDT2	Aggregate	Aggregate	Electricity	62.62824649	4179.327573	0	0		4179.327573			
Los Angeles (MD)	2031	MCY	Aggregate	Aggregate	Gasoline	3585.672201	21623.71192	0.506126337	506.1263371	506.1263371	21623.71192	21623.71192	42.72	MCY
Los Angeles (MD)	2031	MDV	Aggregate	Aggregate	Gasoline	17135.41765	871908.825	38.926918	38926.918	39614.43285	871908.825	918566.3008	23.19	MDV
Los Angeles (MD)	2031	MDV	Aggregate	Aggregate	Diesel	255.1880702	12510.3665	0.459294618	459.2946176		12510.3665			
Los Angeles (MD)	2031	MDV	Aggregate	Aggregate	Electricity	473.2358168	18575.17733	0	0		18575.17733			
Los Angeles (MD)	2031	MDV	Aggregate	Aggregate	Plug-in Hybric	259.9081665	15571.93198	0.228220234	228.2202343		15571.93198			
Los Angeles (MD)	2031	MH	Aggregate	Aggregate	Gasoline	512.17879	4876.81574	0.983546839	983.5468395	1201.62627	4876.81574	7126.090688	5.93	MH
Los Angeles (MD)	2031	MH	Aggregate	Aggregate	Diesel	241.783048	2249.274947	0.218079431	218.0794306		2249.274947			
Los Angeles (MD)	2031	MHDT	Aggregate	Aggregate	Gasoline	128.231781	15437.95717	2.669799017	2669.799017	11371.28782	15437.95717	113972.3944	10.02	MHDT
Los Angeles (MD)	2031	MHDT	Aggregate	Aggregate	Diesel	1766.278837	84624.28566	8.646716515	8646.716515		84624.28566			
Los Angeles (MD)	2031	MHDT	Aggregate	Aggregate	Electricity	210.8803065	13421.69518	0	0		13421.69518			
Los Angeles (MD)	2031	MHDT	Aggregate	Aggregate	Natural Gas	11.77624621	488.4563742	0.054772283	54.77228312		488.4563742			
Los Angeles (MD)	2031	OBUS	Aggregate	Aggregate	Gasoline	39.64109623	2947.981236	0.539216505	539.2165047	1015.484868	2947.981236	6959.414797	6.85	OBUS
Los Angeles (MD)	2031	OBUS	Aggregate	Aggregate	Diesel	49.09805955	3538.811694	0.476268363	476.2683631		3538.811694			
Los Angeles (MD)	2031	OBUS	Aggregate	Aggregate	Electricity	2.793174245	472.6218672	0	0		472.6218672			
Los Angeles (MD)	2031	SBUS	Aggregate	Aggregate	Gasoline	51.84249399	5564.302406	0.580705621	580.7056208	1707.405045	5564.302406	14621.68937	8.56	SBUS
Los Angeles (MD)	2031	SBUS	Aggregate	Aggregate	Diesel	327.6303755	7359.363044	0.938269603	938.2696031		7359.363044			
Los Angeles (MD)	2031	SBUS	Aggregate	Aggregate	Electricity	29.09155966	875.7948098	0	0		875.7948098			
Los Angeles (MD)	2031	SBUS	Aggregate	Aggregate	Natural Gas	35.95144712	822.2291117	0.188429821	188.4298208		822.2291117			
Los Angeles (MD)	2031	UBUS	Aggregate	Aggregate	Electricity	42.68694195	4412.767563	0	0	2676.295239	4412.767563	12427.23556	4.64	UBUS
Los Angeles (MD)	2031	UBUS	Aggregate	Aggregate	Natural Gas	53.74755217	8014.468002	2.676295239	2676.295239		8014.468002			

Source: EMFAC2021 (v1.0.2) Emissions Inventory
Region Type: Sub-Area
Region: Los Angeles (MD)
Calendar Year: 2040
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/day for CVMT and EVMT, trips/day for Trips, kWh/day for Energy Consumption, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	endar Y	hicle Catego	Model Year	Speed	Fuel	Population	Total VMT	Fuel_Consumption	Fuel_Consumption	Total Fuel	VMT	Total VMT	Miles per Gallon	Vehicle Class
Los Angeles (MD)	2040	HHDT	Aggregate	Aggregate	Gasoline	0.128099172	39.38979056	0.007283171	7.283170825	43014.44426	39.38979056	377149.4334	8.77	HHDT
Los Angeles (MD)	2040	HHDT	Aggregate	Aggregate	Diesel	1760.432162	334489.3268	42.87460819	42874.60819		334489.3268			
Los Angeles (MD)	2040	HHDT	Aggregate	Aggregate	Electricity	303.8927467	41755.44444	0	0		41755.44444			
Los Angeles (MD)	2040	HHDT	Aggregate	Aggregate	Natural Gas	6.284123717	865.2723327	0.132552905	132.5529051		865.2723327			
Los Angeles (MD)	2040	LDA	Aggregate	Aggregate	Gasoline	63842.9318	3662236.646	100.1500746	100150.0746	102646.4257	3662236.646	4230137.926	41.21	LDA
Los Angeles (MD)	2040	LDA	Aggregate	Aggregate	Diesel	60.53312826	2791.551306	0.05253661	52.53660964		2791.551306			
Los Angeles (MD)	2040	LDA	Aggregate	Aggregate	Electricity	7795.369169	396304.6823	0	0		396304.6823			
Los Angeles (MD)	2040	LDA	Aggregate	Aggregate	Plug-in Hybric	2903.166071	168805.0458	2.443814494	2443.814494		168805.0458			
Los Angeles (MD)	2040	LDT1	Aggregate	Aggregate	Gasoline	3827.082295	198335.6526	6.456150957	6456.150957	6509.45989	198335.6526	206331.7218	31.70	LDT1
Los Angeles (MD)	2040	LDT1	Aggregate	Aggregate	Diesel	0.033473209	1.98682805	6.46559E-05	0.064655921		1.98682805			
Los Angeles (MD)	2040	LDT1	Aggregate	Aggregate	Electricity	78.59045644	4247.313898	0	0		4247.313898			
Los Angeles (MD)	2040	LDT1	Aggregate	Aggregate	Plug-in Hybric	61.06674912	3746.76848	0.053244277	53.24427671		3746.76848			
Los Angeles (MD)	2040	LDT2	Aggregate	Aggregate	Gasoline	24747.43551	1417125.056	46.36647543	46366.47543	47015.42938	1417125.056	1490407.55	31.70	LDT2
Los Angeles (MD)	2040	LDT2	Aggregate	Aggregate	Diesel	90.84546987	5325.097808	0.129291782	129.2917815		5325.097808			
Los Angeles (MD)	2040	LDT2	Aggregate	Aggregate	Electricity	855.341475	31677.86378	0	0		31677.86378			
Los Angeles (MD)	2040	LDT2	Aggregate	Aggregate	Plug-in Hybric	608.1597018	36279.53279	0.519662171	519.6621707		36279.53279			
Los Angeles (MD)	2040	LHDT1	Aggregate	Aggregate	Gasoline	1433.89398	61186.2943	3.697244095	3697.244095	6023.968405	61186.2943	170678.1684	28.33	LHDT1
Los Angeles (MD)	2040	LHDT1	Aggregate	Aggregate	Diesel	1286.222279	51413.94284	2.32672431	2326.72431		51413.94284			
Los Angeles (MD)	2040	LHDT1	Aggregate	Aggregate	Electricity	951.7022705	58077.93123	0	0		58077.93123			
Los Angeles (MD)	2040	LHDT2	Aggregate	Aggregate	Gasoline	203.8244621	8450.609146	0.568544886	568.5448865	1921.807361	8450.609146	48681.08688	25.33	LHDT2
Los Angeles (MD)	2040	LHDT2	Aggregate	Aggregate	Diesel	665.324283	25284.84777	1.353262475	1353.262475		25284.84777			
Los Angeles (MD)	2040	LHDT2	Aggregate	Aggregate	Electricity	255.9751995	14945.62996	0	0		14945.62996			
Los Angeles (MD)	2040	MCY	Aggregate	Aggregate	Gasoline	3368.922147	20527.65029	0.475916965	475.9169652	475.9169652	20527.65029	20527.65029	43.13	MCY
Los Angeles (MD)	2040	MDV	Aggregate	Aggregate	Gasoline	15317.83248	830195.4597	33.49011674	33490.11674	34131.89269	830195.4597	890878.5757	26.10	MDV
Los Angeles (MD)	2040	MDV	Aggregate	Aggregate	Diesel	184.661366	9709.183252	0.320840009	320.840009		9709.183252			
Los Angeles (MD)	2040	MDV	Aggregate	Aggregate	Electricity	786.1439811	28850.77532	0	0		28850.77532			
Los Angeles (MD)	2040	MDV	Aggregate	Aggregate	Plug-in Hybric	382.4969882	22123.15744	0.320935933	320.9359328		22123.15744			
Los Angeles (MD)	2040	MH	Aggregate	Aggregate	Gasoline	280.9378447	3121.031327	0.626460154	626.4601542	800.9404324	3121.031327	4903.949662	6.12	MH
Los Angeles (MD)	2040	MH	Aggregate	Aggregate	Diesel	177.7110612	1782.918336	0.174480278	174.4802783		1782.918336			
Los Angeles (MD)	2040	MHDT	Aggregate	Aggregate	Gasoline	96.54639628	11560.72504	1.884908507	1884.908507	9412.14341	11560.72504	140489.9223	14.93	MHDT
Los Angeles (MD)	2040	MHDT	Aggregate	Aggregate	Diesel	1541.598008	78229.73697	7.475760747	7475.760747		78229.73697			
Los Angeles (MD)	2040	MHDT	Aggregate	Aggregate	Electricity	877.58967	50240.91018	0	0		50240.91018			
Los Angeles (MD)	2040	MHDT	Aggregate	Aggregate	Natural Gas	10.62051853	458.5501332	0.051474155	51.47415536		458.5501332			
Los Angeles (MD)	2040	OBUS	Aggregate	Aggregate	Gasoline	28.71730005	1895.228765	0.328870937	328.8709365	793.8926331	1895.228765	6982.055076	8.79	OBUS
Los Angeles (MD)	2040	OBUS	Aggregate	Aggregate	Diesel	48.02685766	3623.869075	0.465021697	465.0216966		3623.869075			
Los Angeles (MD)	2040	OBUS	Aggregate	Aggregate	Electricity	9.41097945	1462.957236	0	0		1462.957236			
Los Angeles (MD)	2040	SBUS	Aggregate	Aggregate	Gasoline	38.40686992	4290.566333	0.431692367	431.692367	1308.124658	4290.566333	13773.62922	10.53	SBUS
Los Angeles (MD)	2040	SBUS	Aggregate	Aggregate	Diesel	278.4846776	5795.139566	0.717716634	717.7166343		5795.139566			
Los Angeles (MD)	2040	SBUS	Aggregate	Aggregate	Electricity	98.52822213	2971.786432	0	0		2971.786432			
Los Angeles (MD)	2040	SBUS	Aggregate	Aggregate	Natural Gas	34.35150423	716.1368903	0.158715657	158.7156569		716.1368903			
Los Angeles (MD)	2040	UBUS	Aggregate	Aggregate	Electricity	97.96715512	12038.61049	0	0	1057.899691	12038.61049	15206.61046	14.37	UBUS
Los Angeles (MD)	2040	UBUS	Aggregate	Aggregate	Natural Gas	20.03509722	3167.999966	1.057899691	1057.899691		3167.999966			

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