Lake Creek Logistics Center

ENERGY ANALYSIS

TOWN OF APPLE VALLEY

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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	Lake Creek Logistics Center
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 *Lake Creek Logistics Center Energy Analysis* is 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.3 PROJECT MITIGATION MEASURES (MMS)

The following measures (MM ENG-1 through MM ENG-3) are designed to reduce Project energy usage.

MM ENG-1

The Project Applicant or successor in interest shall implement the following measures:

- The Project's landscape plan shall incorporate drought-tolerant plants and use water-efficient irrigation techniques.
- All appliance fixtures shall be Energy Star-rated.
- All fixtures installed in restrooms and employee break areas shall be U.S. Environmental Protection Agency (EPA) WaterSense certified or equivalent.

MM ENG-2

As a condition of certificates of occupancy, all on-site outdoor cargo handling equipment (including yard trucks, hostlers, yard goats, pallet jacks, forklifts, and other on-site equipment) shall be required to be powered by electricity, compressed natural gas, or gasoline and all indoor cargo handling equipment shall be required to be powered by electricity.

MM ENG-3

The Project shall implement the following measures in order to reduce operational off-road equipment, stationary source, and on-road vehicle air pollutant emissions to the extent feasible:

- Solar Power. At a minimum, the roofs of the warehouse building shall be designed to provide the structural capacity to accommodate roof-top solar panels. The Project shall be designed to include rooftop solar panels that generate sufficient power to meet at least 10% of the Project's total operational base energy requirements from within the Project's building envelope. The Town of Apple Valley shall verify the size and scope of the solar energy system based upon the analysis of the projected power requirements and generating capacity as well as the available solar panel installation space. In the event sufficient space is not available on the Project site to accommodate the needed number of solar panels to produce the operation's base power use, the Project Applicant or successor in interest shall demonstrate how all available space has been maximized (e.g., roof) for solar energy system use. Areas that provide for truck movement may be excluded from these calculations unless otherwise deemed acceptable by the supplied reports and applicable building standards. The Project Applicant or successor in interest, or as contractually delegated by the Project Applicant or successor in interest, shall install the solar energy system when the Town of Apple Valley has approved building permits and the necessary equipment has arrived. The operation of the system shall commence only when it has received permission to operate from the applicable utility. The solar energy system owner shall be responsible for maintaining the system at not less than 80% of the rated power for 20 years. At the end of the 20-year period, the owners, operators, or tenants shall install a new photovoltaic system meeting the capacity and operational requirements of this measure, or continue to maintain the existing system, for the life of the Project. As the Project's demand for solar power increases, additional solar panels may be added to the Project.

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1 INTRODUCTION

This report presents the results of the energy analysis prepared by Urban Crossroads, Inc., for the proposed Lake Creek Logistics Center (Project). The purpose of this report is to ensure that energy implication is considered by the Town of Apple Valley, 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.

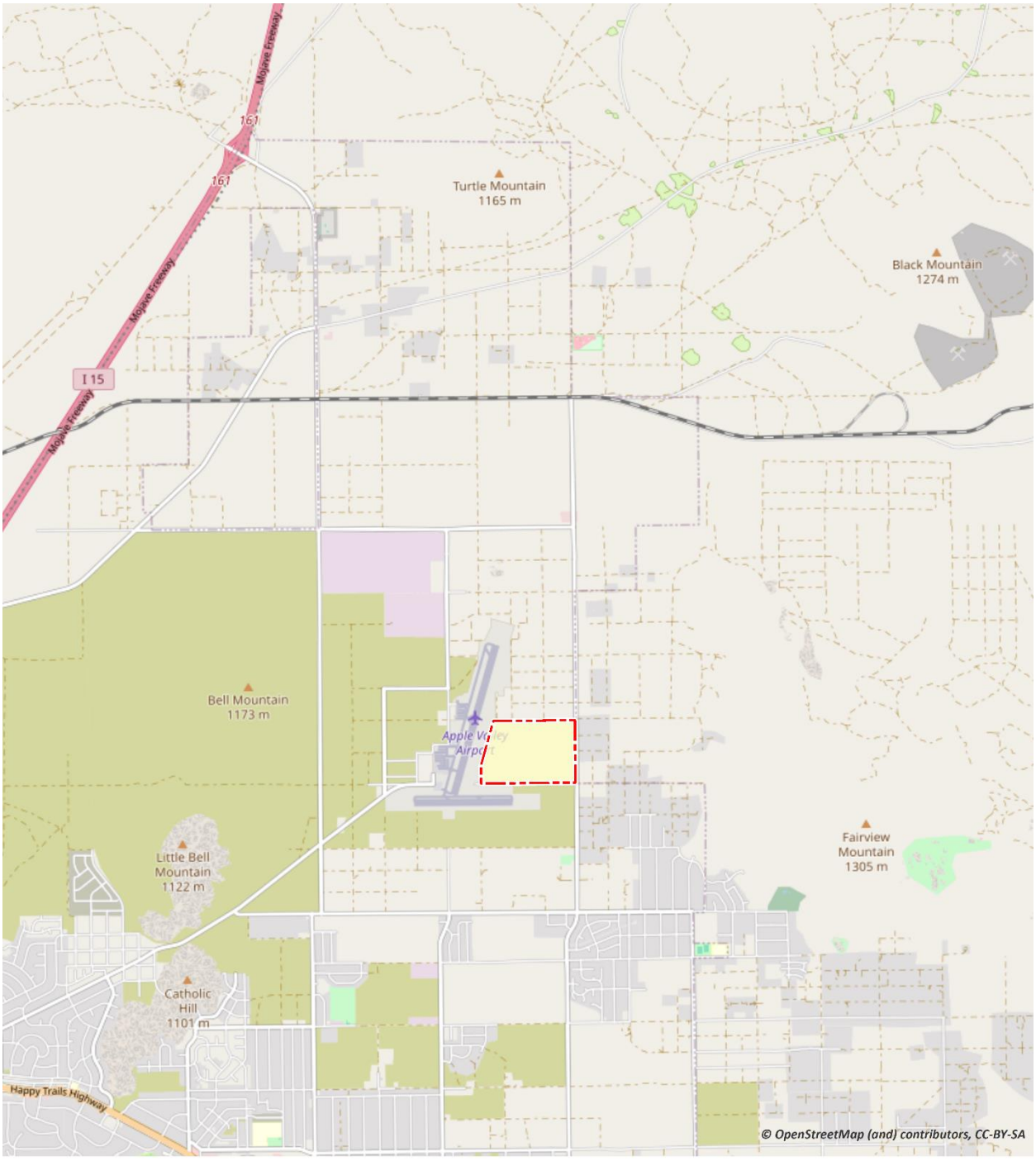
1.1 SITE LOCATION

The proposed Project is located within the North Apple Valley Industrial Specific Plan (NAVISP) and bounded by Gustine Street to the north, Central Road to the east, Corwin Road to the south, and the Apple Valley Airport to the west as shown on Exhibit 1-A. The nearest existing sensitive residential use is located approximately 492 feet east of the Project site.

1.2 PROJECT DESCRIPTION

The Project consists of the development of three industrial warehouse and distribution buildings totaling 3,480,736 square feet (sf). For the purposes of the Energy Analysis, it is proposed that the Project mix will assume 10 percent (%) general light industrial, 10% high-cube cold storage warehouse use, and 80% high-cube fulfillment center warehousing use. A preliminary site plan for the proposed Project is shown on Exhibit 1-B. The Project is anticipated to have an Opening Year of 2029.

EXHIBIT 1-A: LOCATION MAP



LEGEND:

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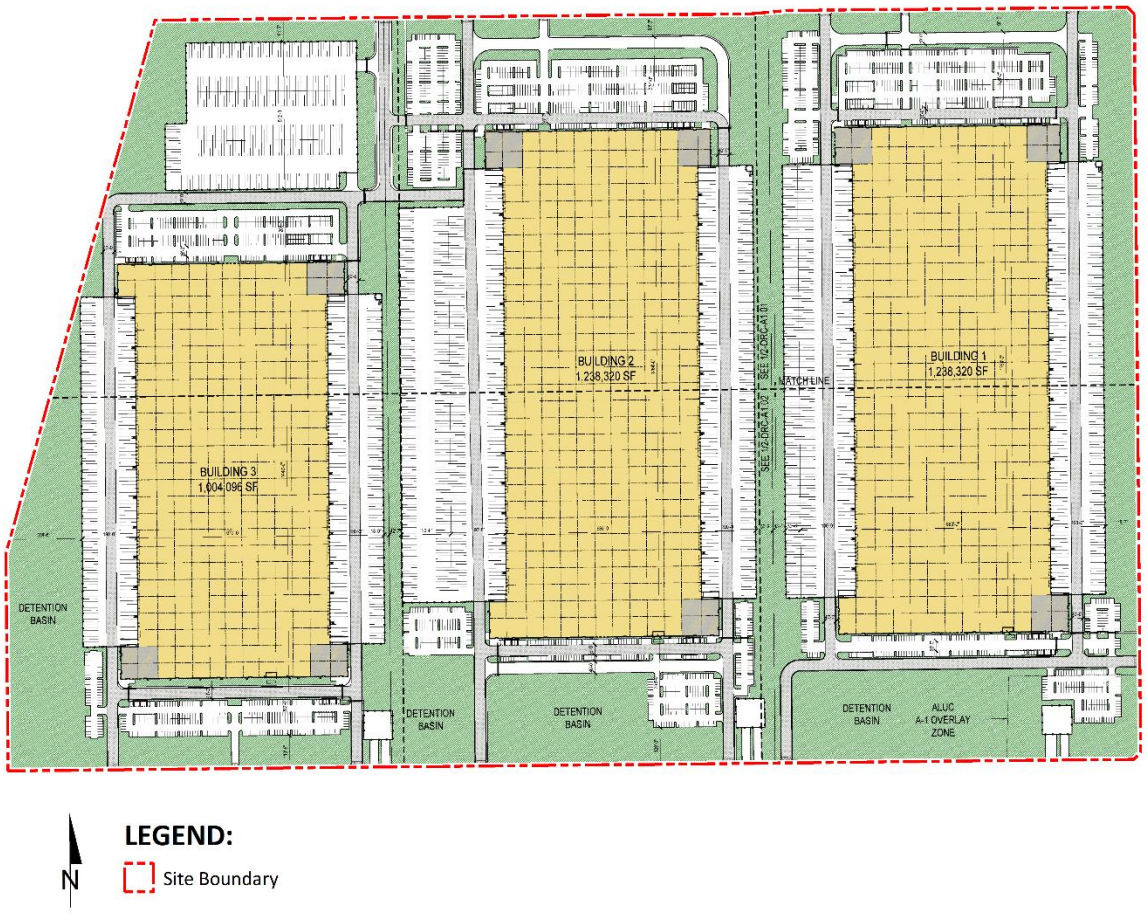
Site Boundary

EXHIBIT 1-B: SITE PLAN



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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 (2):

- 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 (3). 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) (4). 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) (5).

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 (6)

According to the EIA, California used approximately 251,869 gigawatt hours of electricity in 2022 (7). 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 (7).

According to the EIA, California used approximately 200,871 million therms of natural gas in 2022 (8). 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 (8). 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 (8).

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%) (9). 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 (10):

- 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	***94,690***	***43.91%***	***316***	***23,363***	***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	120,932	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: CECs 2023 Total System Electric Generation

2.2 ELECTRICITY

The usage associated with electricity use was calculated using CalEEMod Version 2022.1. 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). Although the once-through cooling phase-out has been ongoing since May 2010 pursuant to the adoption of the State Water Resources Control Board's once-through cooling policy, the retirement of San Onofre has complicated the situation. California Independent Service Operator (ISO) studies revealed the extent to which the Mojave Desert Air Basin (MDAB) 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 (11).

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 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 (12).

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) and Apple Valley Choice Energy (AVCE). Since CalEEMod identifies SCE as the provider for the Project site, this analysis will use SCE to estimate the Project's energy usage. 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 2022 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 (13).

Table 2-2, SCE's specific proportional shares of electricity sources in 2022. As indicated in Table 2-2, the 2022 SCE Power Mix has renewable energy at 33.2% of the overall energy resources. Geothermal resources are at 5.7%, wind power is at 9.8%, large hydroelectric sources are at 3.4%, solar energy is at 17.0%, and coal is at 0% (14).

TABLE 2-2: SCE 2022 POWER CONTENT MIX

Energy Resources	2022 SCE Power Mix
Eligible Renewable	**33.2%**
Biomass & Waste	0.1%
Geothermal	5.7%
Eligible Hydroelectric	0.5%
Solar	17.0%
Wind	9.8%
Coal	**0.0%**
Large Hydroelectric	**3.4%**
Natural Gas	**24.7%**
Nuclear	**8.3%**
Other	**0.1%**
Unspecified Sources of power*	30.3%
Total	**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 commercial 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 [to] 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." (15)

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.

According to the information provided by the Project Applicant, the site is not anticipated to use natural gas for the building envelope, and as such, natural gas consumption is not included in this analysis.

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 (17), and those vehicles consume an

estimated 17.2 billion gallons of fuel each year.[1] 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 (17). 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 (18).

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 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% (18).

[1] Fuel consumptions estimated utilizing information from EMFAC2021.

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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 California Energy Commission (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)

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. The TEA-21 authorizes highway, highway safety, transit, and other efficient surface transportation programs. The 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. The 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 (ITS), 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 (19).

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[2]. The Project would be required to comply with the applicable standards in place at the time plan check submittals are made (20). 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 (21). The Project would be required to comply with the applicable standards in place at the time plan check submittals are made. These require, among other items (22):

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).
- 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).

[2] The 2022 California Green Building Standard Code was published July 1, 2022.

- 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 reused 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 combined 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 sf or for excess consumption where any tenant within a new building or within an addition that is projected 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).

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 CALIFORNIA'S RENEWABLE PORTFOLIO STANDARD (RPS)

First established in 2002 under Senate Bill (SB) 1078, California's Renewable Portfolio Standards (RPS) requires retail sellers of electric services to increase procurement from eligible renewable resources to 44% of total retail sales by 2024 (23).

3.2.6 CLEAN ENERGY AND POLLUTION REDUCTION ACT OF 2015 (SB 350)

In October 2015, the legislature approved and the Governor signed SB 350, which reaffirms California's commitment to reducing its GHG emissions and addressing climate change. Key provisions include an increase in the renewables portfolio standard (RPS), higher energy efficiency requirements for buildings, initial strategies towards a regional electricity grid, and improved infrastructure for electric vehicle charging stations. Specifically, SB 350 requires the following to reduce statewide GHG emissions:

- Increase the amount of electricity procured from renewable energy sources from 33% to 50% by 2030, with interim targets of 40% by 2024, and 45% by 2027.
- Double the energy efficiency in existing buildings by 2030. This target will be achieved through the California Public Utility Commission (CPUC), the CEC, and local publicly owned utilities.
- Reorganize the Independent System Operator (ISO) to develop more regional electricity transmission markets and to improve accessibility in these markets, which will facilitate the growth of renewable energy markets in the western United States (California Leginfo 2015).

3.2.7 EXECUTIVE ORDER N-79-20 AND ADVANCED CLEAN CARS II

- On August 25, 2022, CARB approved the Advanced Clean Cars II rule, which codifies the goals set out in Executive Order N-79-20 and establishes a year-by-year roadmap such that by 2035, 100%

of new cars and light trucks sold in California will be zero-emission vehicles. Under this regulation, automakers are required to accelerate deliveries of zero-emission light-duty vehicles, beginning with model year 2026. CARB estimates that between 2026 and 2040, the regulation would reduce GHG emissions by a cumulative 395 million metric tons, equivalent to reducing petroleum use by 915 million barrels.

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4 PROJECT ENERGY DEMANDS AND ENERGY EFFICIENCY MEASURES

4.1 EVALUATION CRITERIA

Per Appendix F of the *State CEQA Guidelines* (24), 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* (25), 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 *Lake Creek Logistics Center Air Quality Impact Analysis* (AQIA) (26) 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 MDAQMD, 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 (27). Accordingly, the latest version of CalEEMod has been used for this Project to determine air quality emissions. Output from the model runs are provided in Appendices 4.1 and 4.2.

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 CARB to project changes in future emissions from on-road mobile sources (28). 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 2025 through 2029 analysis year was utilized to determine the average vehicle fuel economy used throughout the duration of the Project. Outputs from the EMFAC2021 model run is provided in Appendix 4.3.

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

For purposes of analysis, construction of the Project is expected to commence in March 2025 and would last through December 2029 (26). The construction schedule utilized in the analysis, shown in Table 4-1, represents a "conservative" analysis scenario. The duration of construction activity and associated equipment represents a reasonable approximation of the expected construction fleet as required per *CEQA Guidelines* (1).

TABLE 4-1: CONSTRUCTION DURATION

Phase Name	Start Date	End Date	Days
Site Preparation	03/04/2025	05/12/2025	50
Grading	05/13/2025	10/27/2025	120
Building Construction	10/28/2025	12/17/2029	1,080
Paving	09/12/2028	12/09/2028	64
Architectural Coating	06/08/2027	12/17/2029	660

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 power cost (29). As shown on Table 4-2, the total power cost of the on-site electricity usage during the construction of the Project is estimated to be approximately $527,749.19.

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**
General Light Industrial	$2.66	348.074	57	$52,774.98
High-Cube Cold Storage	$2.66	348.074	57	$52,774.98
High-Cube Fulfillment	$2.66	2,784.588	57	$422,199.23
CONSTRUCTION POWER COST				***$527,749.19***

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 services (30). As shown on Table 4-3, the total electricity usage from on-site Project construction related activities is estimated to be approximately 3,298,432 kWh.

TABLE 4-3: CONSTRUCTION ELECTRICITY USAGE

Land Use	Cost per kWh	Project Construction Electricity Usage (kWh)
General Light Industrial	$0.16	329,844
High-Cube Cold Storage	$0.16	329,844
High-Cube Fulfillment	$0.16	2,638,745
CONSTRUCTION ELECTRICITY USAGE		***3,298,432***

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

A summary of construction equipment assumptions by phase is provided in Table 4-4. Consistent with industry standards and typical construction practices, each piece of equipment listed in Table 4-4 will operate up to a total of eight (8) hours per day, or more than two-thirds of the period during which construction activities are allowed pursuant to the Town Code.

TABLE 4-4: CONSTRUCTION EQUIPMENT ASSUMPTIONS

Construction Activity	Equipment	Amount	Hours Per Day
Site Preparation	Rubber Tired Dozers	5	8
	Crawler Tractors	6	8
Grading	Graders	2	8
	Excavators	3	8
	Scrapers	3	8
	Rubber Tired Dozers	2	8
	Crawler Tractors	3	8
Building Construction	Forklifts	5	8
	Generator Sets	2	8
	Cranes	2	8
	Welders	2	8
	Tractors/Loaders/Backhoes	5	8
Paving	Pavers	2	8
	Paving Equipment	2	8
	Rollers	2	8
Architectural Coating	Air Compressors	1	8

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 (31). 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 commercial fuel providers serving the Project area and region[3]. As presented in Table 4-5, Project construction activities would consume an estimated 348,941 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.

[3] 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

Construction Activity	Duration (Days)	Equipment	HP Rating	Quantity	Usage Hours	Load Factor	HP-hrs/day	Total Fuel Consumption
Site Preparation	50	Rubber Tired Dozers	367	5	8	0.4	5,872	15,870
		Crawler Tractors	87	6	8	0.43	1,796	4,853
Grading	120	Graders	148	2	8	0.41	971	6,298
		Excavators	36	3	8	0.38	328	2,130
		Scrapers	423	3	8	0.48	4,873	31,608
		Rubber Tired Dozers	367	2	8	0.4	2,349	15,235
		Crawler Tractors	87	3	8	0.43	898	5,824
Building Construction	1,080	Forklifts	82	5	8	0.2	656	38,296
		Generator Sets	14	2	8	0.74	166	9,677
		Cranes	367	2	8	0.29	1,703	99,411
		Welders	46	2	8	0.45	331	19,335
		Tractors/Loaders/Backhoes	84	5	8	0.37	1,243	72,576
Paving	330	Pavers	81	2	8	0.42	544	9,709
		Paving Equipment	89	2	8	0.36	513	9,144
		Rollers	36	2	8	0.38	219	3,904
Architectural Coating	660	Air Compressors	37	1	8	0.48	142	5,069
CONSTRUCTION FUEL DEMAND (GALLONS FUEL)								***348,941***

4.3.4 CONSTRUCTION TRIPS AND VMT

Construction generates on-road vehicle emissions from vehicle usage for workers and vendors commuting to and from the site. The number of workers 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.

TABLE 4-6: CONSTRUCTION TRIPS AND VMT

Construction Activity	Worker Trips Per Day	Vendor Trips Per Day	Hauling Trips Per Day
Site Preparation	28	23	0
Grading	33	55	0
Building Construction	1,462	492	0
Paving	15	0	0
Architectural Coating	292	0	0

4.3.5 CONSTRUCTION WORKER FUEL ESTIMATES

With respect to estimated VMT for the Project, the construction worker trips would generate an estimated 32,997,340 VMT during the 57 months of construction (26). Based on CalEEMod methodology, it is assumed that 50% of all vendor trips are from light-duty-auto vehicles (LDA), 25% are from light-duty-trucks (LDT1[4]), and 25% are from light-duty-trucks (LDT2[5]). Data regarding Project related construction worker trips were based on CalEEMod defaults utilized within the 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 CARB to project changes in future emissions from on-road mobile sources (28). EMFAC2021 was run for the LDA, LDT1, and LDT2 vehicle class within the San Bernardino (MD) sub-area for the 2025 through 2029 calendar years. Data from EMFAC2021 is shown in Appendix 4.3.

Table 4-7 provides an estimated annual fuel consumption resulting from Project construction worker trips. Based on Table 4-7, it is estimated that 1,112,545 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.

[4] 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.

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

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)
2025	LDA						
	Site Preparation	50	14	18.5	12,950	32.23	402
	Grading	120	17	18.5	37,740	32.23	1,171
	Building Construction	47	731	18.5	635,605	32.23	19,719
	LDT1						
	Site Preparation	50	7	18.5	6,475	24.70	262
	Grading	120	9	18.5	19,980	24.70	809
	Building Construction	47	366	18.5	318,237	24.70	12,885
	LDT2						
	Site Preparation	50	7	18.5	6,475	24.81	261
	Grading	120	9	18.5	19,980	24.81	805
	Building Construction	47	366	18.5	318,237	24.81	12,827
2026	LDA						
	Building Construction	261	731	18.5	3,529,634	33.14	106,511
	LDT1						
	Building Construction	261	366	18.5	1,767,231	25.20	70,141
	LDT2						
	Building Construction	261	366	18.5	1,767,231	25.48	69,356
2027	LDA						
	Building Construction	261	731	18.5	3,529,634	33.96	103,948
	Architectural Coating	149	146	18.5	402,449	33.96	11,852

Year	Construction Activity	**Duration** (Days)	**Worker Trips/Day**	**Trip Length** (miles)	**VMT**	**Average Vehicle Fuel Economy** (mpg)	**Estimated Fuel Consumption** (gallons)
	LDT1						
	Building Construction	261	366	18.5	1,767,231	25.66	68,877
	Architectural Coating	149	73	18.5	201,225	25.66	7,843
	LDT2						
	Building Construction	261	366	18.5	1,767,231	26.06	67,805
	Architectural Coating	149	73	18.5	201,225	26.06	7,721
2028	LDA						
	Building Construction	260	731	18.5	3,516,110	34.83	100,960
	Paving	79	8	18.5	11,692	34.83	336
	Architectural Coating	260	146	18.5	702,260	34.83	20,164
	LDT1						
	Building Construction	260	366	18.5	1,760,460	26.19	67,211
	Paving	79	4	18.5	5,846	26.19	223
	Architectural Coating	260	73	18.5	351,130	26.19	13,405
	LDT2						
	Building Construction	260	366	18.5	1,760,460	26.67	65,997
	Paving	79	4	18.5	5,846	26.67	219
	Architectural Coating	260	73	18.5	351,130	26.67	13,163
2029	LDA						
	Building Construction	251	731	18.5	3,394,399	35.66	95,185
	Paving	251	8	18.5	37,148	35.66	1,042
	Architectural Coating	251	146	18.5	677,951	35.66	19,011

Year	Construction Activity	**Duration** (Days)	**Worker Trips/Day**	**Trip Length** (miles)	**VMT**	**Average Vehicle Fuel Economy** (mpg)	**Estimated Fuel Consumption** (gallons)
	LDT1						
	Building Construction	251	366	18.5	1,699,521	26.74	63,566
	Paving	251	4	18.5	18,574	26.74	695
	Architectural Coating	251	73	18.5	338,976	26.74	12,678
	LDT2						
	Building Construction	251	366	18.5	1,699,521	27.25	62,374
	Paving	251	4	18.5	18,574	27.25	682
	Architectural Coating	251	73	18.5	338,976	27.25	12,441
TOTAL CONSTRUCTION WORKER FUEL CONSUMPTION							***1,112,545***

4.3.6 CONSTRUCTION VENDOR/HAULING FUEL ESTIMATES

With respect to estimated VMT, the construction vendor trips (vehicles that deliver materials to the site during construction) would generate an estimated 5,500,656 VMT along area roadways for the Project over the duration of construction activity (26). It is assumed that 50% of all vendor trips are from medium-heavy duty trucks (MHDT), 50% of vendor trips are from heavy-heavy duty trucks (HHDT), and 100% of hauling trips are from HHDTs. These assumptions are consistent with the CalEEMod defaults utilized within the within the AQIA (26). Vehicle fuel efficiencies for MHDTs and HHDTs were estimated using information generated within EMFAC2021. EMFAC2021 was run for the MHDT and HHDT vehicle classes within the San Bernardino (MD) sub-area for the 2025 through 2029 calendar years. Data from EMFAC2021 is shown in Appendix 4.3.

As previously shown in Table 4-8, it is estimated that 755,309 gallons of fuel will be consumed related to construction vendor trips during full construction of the Project. It should be noted that Project construction vendor 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 FUEL CONSUMPTION ESTIMATES

Year	Construction Activity	**Duration** (Days)	**Vendor Trips/Day**	**Trip Length** (miles)	**VMT**	**Average Vehicle Fuel Economy** (mpg)	**Estimated Fuel Consumption** (gallons)
2025	MHDT						
	Site Preparation	50	12	10.2	6,120	7.61	804
	Grading	120	28	10.2	34,272	7.61	4,505
	Building Construction	47	246	10.2	117,932	7.61	15,501
	HHDT						
	Site Preparation	50	12	10.2	6,120	6.32	968
	Grading	120	28	10.2	34,272	6.32	5,421
	Building Construction	47	246	10.2	117,932	6.32	18,655
2026	MHDT						
	Building Construction	261	246	10.2	654,901	7.75	84,543
	HHDT						
	Building Construction	261	246	10.2	654,901	6.46	101,391
2027	MHDT						
	Building Construction	261	246	10.2	654,901	7.91	82,796
	HHDT						
	Building Construction	261	246	10.2	654,901	6.61	99,011
2028	MHDT						
	Building Construction	260	246	10.2	652,392	8.12	80,302
	HHDT						
	Building Construction	260	246	10.2	652,392	6.79	96,043
2029	MHDT						

Year	**Construction Activity**	**Duration** (Days)	**Vendor Trips/Day**	**Trip Length** (miles)	**VMT**	**Average Vehicle Fuel Economy** (mpg)	**Estimated Fuel Consumption** (gallons)
	Building Construction	251	246	10.2	629,809	8.39	75,078
	HHDT						
	Building Construction	251	246	10.2	629,809	6.98	90,290
TOTAL CONSTRUCTION VENDOR FUEL CONSUMPTION							***755,309***

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 employed 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. 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. Enforcement of idling limitations is realized through periodic site inspections conducted by Town building officials, and/or in response to citizen complaints.

A full analysis related to the energy needed to form construction materials is not included in this analysis due to a lack of detailed Project-specific information on construction materials. 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, the 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 energy demands (energy consumed by passenger car and truck vehicles accessing the Project site) and facilities energy demands (energy consumed by development operations and site maintenance activities).

4.4.1 TRANSPORTATION ENERGY 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 can be 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 (28). EMFAC2021 was run for the San Bernardino (MD) sub-area for the 2029 calendar year. Data from EMFAC2021 is shown in Appendix 4.3.

In order to account for the possibility of refrigerated uses (cold storage), it is assumed that 10% of trucks accessing this land use (i.e., all truck trips associated with the cold storage uses) are presumed to also have transport refrigeration units (TRUs). Therefore, for modeling purposes 132 trucks are assumed to be trucks with TRUs. TRUs are also accounted for during on-site and off-site travel. The TRU calculations are based on EMFAC2021.

As summarized in Table 4-9, the Project would result in 42,785,395 annual VMT and an estimated annual fuel consumption of 2,836,022 gallons of fuel.

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

Vehicle Type	Average Vehicle Fuel Economy (mpg)	Annual VMT	Estimated Annual Fuel Consumption (gallons)
LDA	35.66	14,502,247	406,670
LDT1	26.74	1,183,690	44,273
LDT2	27.25	6,668,805	244,751
MDV	21.99	4,624,214	210,330
LHDT1	17.87	1,845,282	103,241
LHDT2	16.83	514,022	30,536
MHDT	8.39	1,718,726	204,886
HHDT	6.98	10,973,974	1,573,243
MCY	41.70	754,432	18,091
TOTAL (ALL VEHICLES)		***42,785,395***	***2,836,022***

4.4.2 TRANSPORTATION REFRIGERATION UNIT ENERGY DEMANDS

Energy would be consumed by truck and trailer mounted transportation refrigeration units (TRUs) that visit the Project site. For modeling purposes, it was estimated that 264 two-way truck trips (132 trucks) have the potential to include TRUs. TRU fuel consumption was estimated using

information generated from EMFAC2017 for the San Bernardino (MD) sub-area. It is estimated that the Project will result in an estimated annual fuel consumption of 122,206 gallons due to the use of TRUs.

TABLE 4-10: TRU FUEL CONSUMPTION ESTIMATES

TRU Type	Trucks	Number of Days	Operating Hours	Rate	Total Fuel Consumption
Truck	61	365	4	0.55	49,339
Trailer	71	365	4	0.71	72,867
TRU FUEL DEMAND (GALLONS DIESEL FUEL)					***122,206***

4.4.3 STATIONARY SOURCE ENERGY DEMANDS

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. For the purposes of this analysis, the calculations are based on three 300 hp diesel-fueled emergency fire pumps. Diesel fuel would be supplied by existing industrial fuel providers serving the Town and region. As presented in Table 4-11, Project stationary sources would consume an estimated 1,695 gallons of diesel fuel per year.

TABLE 4-11: EMERGENCY FIRE PUMP FUEL CONSUMPTION ESTIMATES

Equipment	Horsepower	Fuel Consumption (gal./hour)	Activity (hrs./yr)	Total Fuel Consumption (gal./year)
Fire Pump	300	11	50	565
Fire Pump	300	11	50	565
Fire Pump	300	11	50	565
EMERGENCY FIRE PUMP FUEL DEMAND (GALLONS DIESEL FUEL)				***1,695***

4.4.4 ON-SITE CARGO HANDLING EQUIPMENT FUEL DEMANDS

ON-SITE CARGO HANDLING EQUIPMENT FUEL DEMANDS – WITHOUT MITIGATION

It is common for industrial buildings to require the operation of exterior cargo handling equipment in the building's truck court areas. For this particular Project, on-site modeled operational equipment includes up to thirteen (13) compressed natural gas cargo handling equipment operating at 4 hours a day[6] for 365 days of the year .

[6] 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.

Project operational activity estimates and associated fuel consumption estimates are based on the annual EMFAC2021 offroad emissions for the 2029 operational year and was used to derive the total annual fuel consumption associated on-site equipment. As presented in Table 4-12, Project on-site equipment would consume an estimated 60,344 diesel equivalent gallons of natural gas.

TABLE 4-12: ON-SITE CARGO HANDLING EQUIPMENT FUEL DEMAND (WITHOUT MITIGATION)

Equipment	Quantity	Usage Hours	Days of Operation	EMFAC2021 Fuel Consumption (gal./yr)	EMFAC2021 Activity (hrs./yr)	Total Fuel Demand
Cargo Handling Equipment	13	4	365	20,401	6,417	60,344
ON-SITE CARGO HANDLING EQUIPMENT FUEL DEMAND (GALLONS FUEL)						***60,344***

RECOMMENDED OPERATIONAL MITIGATION MEASURES

MM ENG-2

As a condition of certificates of occupancy, all on-site outdoor cargo handling equipment (including yard trucks, hostlers, yard goats, pallet jacks, forklifts, and other on-site equipment) shall be required to be powered by electricity, compressed natural gas, or gasoline and all indoor cargo handling equipment shall be required to be powered by electricity.

ON-SITE CARGO HANDLING EQUIPMENT FUEL DEMANDS – WITH MITIGATION

The estimated fuel demand from on-site cargo handling equipment summarized on Table 4-13 represent the fuel demand after implementation of MM ENG-2. The operational activity estimates and corresponding fuel consumption calculations are derived from the CEC Clean Transportation Program's *Advanced Battery-Electric Port Vehicles* report, which provided data on the total electricity usage of yard tractors. According to the report, the average annual fuel consumption for a yard tractor is approximately 44.37 kW per hour (32). As presented in Table 4-13, Project on-site equipment would consume an estimated 842,110.15 kWh/year.

TABLE 4-13: ON-SITE CARGO HANDLING EQUIPMENT FUEL DEMAND (WITH MITIGATION)

Equipment	Quantity	Usage Hours	Days of Operation	Average Electrical Consumption (kW/hr)	Total Fuel Demand
Cargo Handling Equipment	13	4	365	44.37	842,110.15
ON-SITE CARGO HANDLING EQUIPMENT FUEL DEMAND (TOTAL KWH)					***842,110.15***

4.4.5 FACILITY ENERGY DEMANDS

FACILITY ENERGY DEMANDS – WITHOUT MITIGATION

Project operational activities would result in the consumption of electricity which would be supplied to the Project by SCE. As previously stated, the analysis herein assumes compliance with the 2022 Title 24 and CALGreen standards. Based on information provided by the Project applicant, the site is not expected to utilize natural gas for the building envelope. Annual electricity usage of the Project is summarized in Table 4-14 and provided in Appendix 4.2.

TABLE 4-14: PROJECT ANNUAL OPERATIONAL ENERGY DEMAND SUMMARY (WITHOUT MITIGATION)

Land Use	Electricity Demand (kWh/year)	Natural Gas Demand (kBTU/year)
General Light Industrial	3,319,833	0
High-Cube Cold Storage	7,621,233	0
High-Cube Fulfillment	12,861,185	0
On-Site Equipment	0	60,344
Parking Lot	1,208,863	0
PROJECT ENERGY DEMAND	***25,011,114***	***60,344***

kWh – kilo-Watt hours
kBTU – kilo-British thermal units

RECOMMENDED OPERATIONAL MITIGATION MEASURES

MM ENG-1

The Project Applicant or successor in interest shall implement the following measures:

- The Project's landscape plan shall incorporate drought-tolerant plants and use water-efficient irrigation techniques.
- All appliance fixtures shall be Energy Star-rated.
- All fixtures installed in restrooms and employee break areas shall be U.S. Environmental Protection Agency (EPA) WaterSense certified or equivalent.

MM ENG-2

As a condition of certificates of occupancy, all on-site outdoor cargo handling equipment (including yard trucks, hostlers, yard goats, pallet jacks, forklifts, and other on-site equipment) shall be required to be powered by electricity, compressed natural gas, or gasoline and all indoor cargo handling equipment shall be required to be powered by electricity.

MM ENG-3

The Project shall implement the following measures in order to reduce operational off-road equipment, stationary source, and on-road vehicle air pollutant emissions to the extent feasible:

- Solar Power. At a minimum, the roofs of the warehouse building shall be designed to provide the structural capacity to accommodate roof-top solar panels. The Project shall be designed to include

rooftop solar panels that generate sufficient power to meet at least 10% of the Project's total operational base energy requirements from within the Project's building envelope. The Town of Apple Valley shall verify the size and scope of the solar energy system based upon the analysis of the projected power requirements and generating capacity as well as the available solar panel installation space. In the event sufficient space is not available on the Project site to accommodate the needed number of solar panels to produce the operation's base power use, the Project Applicant or successor in interest shall demonstrate how all available space has been maximized (e.g., roof) for solar energy system use. Areas that provide for truck movement may be excluded from these calculations unless otherwise deemed acceptable by the supplied reports and applicable building standards. The Project Applicant or successor in interest, or as contractually delegated by the Project Applicant or successor in interest, shall install the solar energy system when the Town of Apple Valley has approved building permits and the necessary equipment has arrived. The operation of the system shall commence only when it has received permission to operate from the applicable utility. The solar energy system owner shall be responsible for maintaining the system at not less than 80% of the rated power for 20 years. At the end of the 20-year period, the owners, operators, or tenants shall install a new photovoltaic system meeting the capacity and operational requirements of this measure, or continue to maintain the existing system, for the life of the Project. As the Project's demand for solar power increases, additional solar panels may be added to the Project.

OPERATIONAL EMISSIONS SUMMARY – WITH MITIGATION

The estimated energy demands summarized on Table 4-15 represent the Project's operational emissions after implementation of MM ENG-1 and MM ENG-3.

TABLE 4-15: PROJECT ANNUAL OPERATIONAL ENERGY DEMAND SUMMARY (WITH MITIGATION)

Land Use	Electricity Demand (kWh/year)	Natural Gas Demand (kBTU/year)
General Light Industrial	2,890,865	0
High-Cube Cold Storage	3,453,489	0
High-Cube Fulfillment	11,575,067	0
On-Site Equipment	842,110	0
Parking Lot	1,208,863	0
PROJECT ENERGY DEMAND	***19,970,394***	***0***

4.4.6 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 Table 4-9 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.

4.5 SUMMARY

4.5.1 CONSTRUCTION ENERGY DEMANDS

The estimated power cost of on-site electricity usage during the building construction of the Project is assumed to be approximately $527,749.19. Additionally, based on the assumed power cost, it is estimated that the total electricity usage during building construction, after full Project build-out, is calculated to be approximately 3,298,432 kWh.

Construction equipment used by the Project would result in single event consumption of approximately 348,941 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. Enforcement of idling limitations is realized through periodic site inspections conducted by Town building officials, and/or in response to citizen complaints.

Construction worker trips for full construction of the Project would result in the estimated fuel consumption of 1,112,545 gallons of fuel. Additionally, fuel consumption from construction vendor trips (MHDTs and HHDTs) would total approximately 755,309 gallons. Diesel fuel would be supplied by regional industrial vendors. Indirectly, construction energy efficiency 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 (33). 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 would result in a fuel demand of 2,958,228 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 are being tested this year and MDAQMD 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 percent 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 would need to have 2010 model year engines or equivalent (34).
- 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.

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. As supported by

the preceding discussions, Project transportation energy consumption would not be considered inefficient, wasteful, or otherwise unnecessary.

FACILITY ENERGY DEMANDS

Project facility operational energy demands are estimated to result in 19,970,394 kWh/year of electricity which would be supplied by SCE. As previously stated, the site is not expected to utilize natural gas for the building envelope. The Project proposes conventional industrial uses reflecting contemporary 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 industrial uses of similar scale and configuration.

Implementation of the Project would increase the demand for electricity at the Project site and petroleum consumption in the region during operation. However, the electrical consumption demands of the Project during operation would conform to the state's Title 24 and to CALGreen standards, which implement conservation measures. Further, the proposed Project would not directly require the construction of new energy generation or supply facilities and providers of electricity are in compliance with regulatory requirements that assist in conservation, including requirements that electrical providers achieve state-mandated renewal energy production requirements. With compliance with Title 24 conservation standards and other regulatory requirements, the Project would not be wasteful or inefficient or unnecessarily consume energy resources during construction or operation and would result in a less-than-significant impact with respect to consumption of energy resources.

Lastly, the Project will comply with the applicable Title 24 standards. Compliance itself with applicable Title 24 standards will ensure that the Project energy demands would not be inefficient, wasteful, or otherwise unnecessary.

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5 CONCLUSIONS

5.1 ENERGY IMPACT 1

Would the Project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Impact Analysis

A significant impact would occur if the proposed Project would result in the inefficient, wasteful, or unnecessary use of energy.

Construction

Based on CalEEMod estimations within the modeling output files used to estimate GHG emissions associated with development of the project, construction-related vehicle trips would result in approximately 38,497,996 VMT and consume an estimated 1,867,855 gallons of gasoline and diesel combined during construction. Additionally, on-site construction equipment would consume an estimated 348,941 gallons of diesel fuel. Limitations on idling of vehicles and equipment and requirements that equipment be properly maintained would result in fuel savings. California Code of Regulations, Title 13, Sections 2449 and 2485, limit idling from both on-road and off-road diesel-powered equipment and are enforced by the ARB. Additionally, given the cost of fuel, contractors and owners have a strong financial incentive to avoid wasteful, inefficient, and unnecessary consumption of energy during construction.

Due to the temporary nature of construction and the financial incentives for developers and contractors to use energy-consuming resources in an efficient manner, the construction phase of the proposed Project would not result in wasteful, inefficient, and unnecessary consumption of energy. Therefore, the construction-related impacts related to electricity and fuel consumption would be less than significant.

Operation

Electricity

Operation of the proposed Project would consume energy as part of building operations and transportation activities. Building operations would involve energy consumption for multiple purposes including, but not limited to, building heating and cooling, refrigeration, lighting, and electronics. Based on CalEEMod energy use estimations, operations for the Project would result in approximately 19,970,394 kWh/year of electricity.

The Project would be designed and constructed in accordance with the Town's latest adopted energy efficiency standards, which are based on the California Title 24 energy efficiency standards. Title 24 standards include a broad set of energy conservation requirements that apply to the structural, mechanical, electrical, and plumbing systems in a building. For example, the Title 24 Lighting Power Density requirements define the maximum wattage of lighting that can

be used in a building based on its square footage. Title 24 standards are widely regarded as the most advanced energy efficiency standards, would help reduce the amount of energy required for lighting, water heating, and heating and air conditioning in buildings and promote energy conservation.

Fuel

Operational energy would also be consumed during vehicle trips associated with the Project. Fuel consumption would be primarily related to vehicle use by visitors and employees associated with the Project. Based on CalEEMod energy use estimations, project-related vehicle trips would result in approximately 42.79 million VMT and consume an estimated 2,958,228 gallons of gasoline and diesel combined, annually (see Appendices 4.1 through 4.3).

The Project is surrounded by existing transportation facilities and infrastructure which would provide future visitors and employees associated with the Project access to a mix of land uses near the Project, thus further reducing fuel consumption demand. Additionally, the Project would provide electronic vehicle (EV) parking and EV associated infrastructure that would further promote fuel efficient vehicles. For these reasons, operational-related transportation fuel consumption would not result in a significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources. Therefore, the operational impact related to vehicle fuel consumption would be less than significant.

5.2 ENERGY IMPACT 2

Would the Project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Impact Analysis

A significant impact would occur if the proposed Project would conflict with or obstruct a State or local plan for renewable energy or energy efficiency.

Construction

As discussed in Section 5.1 above, the proposed Project would result in energy consumption through the combustion of fossil fuels in construction vehicles, worker commute vehicles, and construction equipment, and the use of electricity for temporary buildings, lighting, and other sources. California Code of Regulations Title 13, Sections 2449 and 2485, limit idling from both on-road and off-road diesel-powered equipment and are enforced by the ARB. The proposed Project would comply with these regulations. There are no policies at the local level applicable to energy conservation specific to the construction phase. Thus, it is anticipated that construction of the proposed project would not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing energy use or increasing the use of renewable energy. Therefore, construction-related energy efficiency and renewable energy standards consistency impacts would be less than significant.

Operation

California's Renewable Portfolio Standard (RPS) establishes a goal of renewable energy for local providers to be 44 percent by 2040. Similarly, the State is promoting renewable energy targets to meet the 2022 Scoping Plan greenhouse gas emissions reductions. As discussed in Section 5.1 above, the Project would result in approximately 19,970,394 kWh/year of electricity annually.

The Project would be designed and constructed in accordance with the Town's latest adopted energy efficiency standards, which are based on the California Title 24 energy efficiency standards. Title 24 standards include a broad set of energy conservation requirements that apply to the structural, mechanical, electrical, and plumbing systems in a building. For example, the Title 24 Lighting Power Density requirements define the maximum wattage of lighting that can be used in a building based on its square footage. Title 24 standards, widely regarded as the most advanced energy efficiency standards, would help reduce the amount of energy required for lighting, water heating, and heating and air conditioning in buildings and promote energy conservation.

Compliance with the aforementioned mandatory measures would ensure that the Project would not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing energy use or increasing the use of renewable energy. Therefore, operational energy efficiency and renewable energy standards consistency impacts would be less than significant.

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6 REFERENCES

1. **Association of Environmental Professionals.** *2024 CEQA California Environmental Quality Act.* 2024.
2. **Administration, U.S. Energy Information.** California State Profile and Energy Estimates. [Online] https://www.eia.gov/state/data.php?sid=CA#ConsumptionExpenditures.
3. **U.S. Energy Information Administration.** Use of Energy in the United States Explained Energy Use for Transportation. [Online] https://www.eia.gov/energyexplained/use-of-energy/transportation.php.
4. —. Use of Energy in the United States Explained Energy Use for Transportation. [Online] https://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=PET&s=MTPUPUS1&f=A.
5. —. Prime Supplier Sales Volume, California, Annual. [Online] 2021. https://www.eia.gov/dnav/pet/pet_cons_prim_dcu_SCA_a.htm.
6. —. California Energy Consumption by End-Use Sector. *California State Profile and Energy Estimates.* [Online] https://www.eia.gov/state/?sid=CA#tabs-2.
7. —. California State Profile and Energy Estimates. [Online] https://www.eia.gov/state/seds/sep_fuel/html/pdf/fuel_use_es.pdf.
8. —. California State Profile and Energy Estimates. [Online] https://www.eia.gov/dnav/ng/ng_cons_sum_dcu_SCA_a.htm.
9. **California Energy Commission.** 2023 Total System Electric Generation. *CA.gov.* [Online] https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/2023-total-system-electric-generation.
10. **U.S. Energy Information Administration.** California State Profile and Energy Estimates. [Online] https://www.eia.gov/state/?sid=CA.
11. **California Energy Commission.** Integrated Energy Policy Report. [Online] https://www.energy.ca.gov/data-reports/reports/integrated-energy-policy-report.
12. **California ISO.** Understanding the ISO. [Online] http://www.caiso.com/about/Pages/OurBusiness/UnderstandingtheISO/default.aspx.
13. **Southern California Edison.** *Southern California Edison's Service Area.* [Online] https://download.newsroom.edison.com/create_memory_file/?f_id=5cc32d492cfac24d21aecf4c&content_verified=True.
14. **Southern Californai Edison.** 2022 Power Content Label. *Southern California Edison.* [Online] https://www.sce.com/sites/default/files/custom-files/PDF_Files/SCE_2022_Power_Content_Label_B%26W.pdf.
15. **California Public Utilities Commission.** Natural Gas and California. [Online] https://www.cpuc.ca.gov/industries-and-topics/natural-gas/natural-gas-and-california.
16. **U.S. Energy Information Administration.** California Energy Consumption by End-Use Sector. *California State Profile and Energy Estimates.* [Online] https://www.eia.gov/state/?sid=CA#tabs-2.
17. —. California Analysis. *Energy Information Administration.* [Online] https://www.eia.gov/beta/states/states/ca/analysis.
18. **California Energy Commission Staff.** 2022 Integrated Energy Policy Report Update. [Online] 2022. https://www.energy.ca.gov/sites/default/files/2023-02/Adopted_2022_IEPR_Update_with_errata_ada.pdf.

19. **The California Energy Commission.** 2022 Building Energy Efficiency Standards. *California Energy Commission.* [Online] 2022. https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2022-building-energy-efficiency.
20. **California Energy Commission.** Energy Commission Adopts Updated Building Standards to Improve Efficiency, Reduce Emissions from Homes and Businesses. [Online] August 11, 2021. https://www.energy.ca.gov/news/2021-08/energy-commission-adopts-updated-building-standards-improve-efficiency-reduce-0.
21. **California Department of General Services.** 2022 CALGreen Code. *CALGreen.* [Online] https://codes.iccsafe.org/content/CAGBC2022P1.
22. **California Energy Commission.** Renewables Portfolio Standard (RPS). [Online] 2002. http://www.energy.ca.gov/portfolio/.
23. **State of California.** *California Environmental Quality Act Guideline, California Public Resources Code, Title 14, Division 6, Chapter 3,.*
24. **Association of Environmental Professionals.** *2019 CEQA California Environmental Quality Act.* 2019.
25. **Urban Crossroads, Inc.** *Lake Creek Logistics Center Air Quality Impact Analysis (AQIA) .* 2024.
26. **California Air Pollution Control Officers Association (CAPCOA).** California Emissions Estimator Model (CalEEMod). [Online] May 2022. www.caleemod.com.
27. **California Department of Transportation.** EMFAC Software. [Online] http://www.dot.ca.gov/hq/env/air/pages/emfac.htm.
28. **Pray, Richard.** *2024 National Construction Estimator.* Carlsbad : Craftsman Book Company, 2024.
29. **Southern California Edison.** Schedule GS-1 General Service. *Regulatory Information - Rates Pricing.* [Online] https://www.sce.com/regulatory/tariff-books/rates-pricing-choices.
30. **California Air Resources Board.** *Methods to Find the Cost-Effectiveness of Funding Air Quality Projects For Evaluating Motor Vehicle Registration Fee Projects And Congestion Mitigation and Air Quality Improvement (CMAQ) Projects, Emission Factor Tables.* 2018.
31. **California Energy Commission.** *Advanced Battery-Electric Port Vehicles.* s.l. : Transportation Power, Inc., 2021.
32. **California Energy Commission Staff.** 2023 Integrated Energy Policy Report Update. [Online] 2024. https://www.energy.ca.gov/data-reports/reports/integrated-energy-policy-report/2023-integrated-energy-policy-report.
33. **California Air Resources Board.** Truck and Bus Regulation. [Online] https://ww2.arb.ca.gov/our-work/programs/truck-and-bus-regulation.

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7 CERTIFICATIONS

The contents of this energy report represent an accurate depiction of the environmental impacts associated with the proposed Lake Creek Logistics Center. 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 CONSTRUCTION EMISSIONS MODEL OUTPUTS

Lake Creek Logistics Center (Construction) Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Lake Creek Logistics Center (Construction)
Construction Start Date	3/4/2025
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	5.00
Precipitation (days)	12.4
Location	34.57509227224038, -117.17721847885088
County	San Bernardino-Mojave Desert
City	Apple Valley
Air District	Mojave Desert AQMD
Air Basin	Mojave Desert
TAZ	5160
EDFZ	10
Electric Utility	Southern California Edison
Gas Utility	Southwest Gas Corp.
App Version	2022.1.1.28

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
General Heavy Industry	348	1000sqft	7.99	348,074	0.00	—	—	—

Refrigerated Warehouse-No Rail	348	1000sqft	7.99	348,074	0.00	—	—	—
Unrefrigerated Warehouse-No Rail	2,785	1000sqft	64.5	2,784,588	24,966	—	—	—
Parking Lot	4,597	Space	31.7	0.00	0.00	—	—	—
Other Asphalt Surfaces	4,911	1000sqft	113	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

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

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	40.8	39.3	61.6	160	0.18	3.11	27.3	28.4	2.86	6.58	7.61	—	45,534	45,534	1.08	2.87	111	46,503
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	39.2	38.4	61.7	121	0.18	3.11	27.3	28.4	2.86	6.58	7.61	—	42,768	42,768	1.15	2.90	3.13	43,641
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	27.2	26.6	33.1	88.1	0.13	1.41	19.3	20.0	1.30	4.65	5.27	—	30,231	30,231	0.42	2.05	33.8	30,882
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.96	4.86	6.03	16.1	0.02	0.26	3.53	3.65	0.24	0.85	0.96	—	5,005	5,005	0.07	0.34	5.59	5,113

2.2. Construction Emissions by Year, Unmitigated

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

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	8.00	6.74	61.6	55.1	0.12	3.11	9.91	13.0	2.86	4.61	7.47	—	13,280	13,280	0.47	0.34	6.55	13,399
2026	10.9	9.74	41.4	144	0.17	0.97	23.3	24.3	0.91	5.64	6.56	—	41,086	41,086	1.08	2.86	110	42,076
2027	39.2	37.8	41.6	158	0.17	0.92	27.1	28.1	0.86	6.54	7.40	—	44,671	44,671	0.51	2.85	111	45,645
2028	40.8	39.3	46.0	160	0.18	1.10	27.3	28.4	1.03	6.58	7.61	—	45,534	45,534	0.57	2.87	100	46,503
2029	39.6	38.8	44.6	151	0.18	1.03	27.3	28.4	0.97	6.58	7.55	—	44,679	44,679	0.57	2.76	89.3	45,605
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	10.6	9.34	61.7	114	0.17	3.11	23.3	24.4	2.86	5.64	7.47	—	39,384	39,384	1.15	2.86	3.13	40,269
2026	10.1	8.88	43.0	107	0.17	0.97	23.3	24.3	0.91	5.64	6.56	—	38,709	38,709	0.52	2.86	2.84	39,578
2027	38.4	36.9	43.2	117	0.17	0.92	27.1	28.1	0.86	6.54	7.40	—	41,871	41,871	0.58	2.90	2.88	42,752
2028	39.2	38.4	47.6	121	0.18	1.10	27.3	28.4	1.03	6.58	7.61	—	42,768	42,768	0.61	2.87	2.60	43,641
2029	38.8	37.2	45.4	116	0.18	1.03	27.3	28.4	0.97	6.58	7.55	—	41,970	41,970	0.61	2.76	2.32	42,810
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	4.88	4.17	33.1	40.5	0.07	1.41	6.21	7.63	1.30	2.05	3.35	—	10,813	10,813	0.35	0.50	7.78	10,979
2026	7.27	6.42	31.0	83.2	0.12	0.69	16.5	17.2	0.65	4.00	4.65	—	28,032	28,032	0.39	2.05	33.8	28,685
2027	18.6	17.6	30.6	85.4	0.12	0.65	18.1	18.7	0.61	4.36	4.97	—	29,147	29,147	0.40	2.03	32.6	29,794
2028	27.2	26.6	31.2	88.1	0.13	0.66	19.3	20.0	0.62	4.65	5.27	—	30,231	30,231	0.40	2.05	30.9	30,882
2029	26.7	26.1	31.7	85.2	0.13	0.71	18.6	19.3	0.66	4.49	5.15	—	29,248	29,248	0.42	1.90	26.5	29,850
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.89	0.76	6.03	7.38	0.01	0.26	1.13	1.39	0.24	0.37	0.61	—	1,790	1,790	0.06	0.08	1.29	1,818
2026	1.33	1.17	5.67	15.2	0.02	0.13	3.02	3.14	0.12	0.73	0.85	—	4,641	4,641	0.07	0.34	5.59	4,749
2027	3.39	3.21	5.58	15.6	0.02	0.12	3.30	3.41	0.11	0.80	0.91	—	4,826	4,826	0.07	0.34	5.41	4,933

2028	4.96	4.86	5.70	16.1	0.02	0.12	3.53	3.65	0.11	0.85	0.96	—	5,005	5,005	0.07	0.34	5.12	5,113
2029	4.88	4.77	5.78	15.6	0.02	0.13	3.40	3.53	0.12	0.82	0.94	—	4,842	4,842	0.07	0.31	4.38	4,942

3. Construction Emissions Details

3.1. Site Preparation (2025) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	7.80	6.56	60.7	52.4	0.08	3.10	—	3.10	2.85	—	2.85	—	8,981	8,981	0.36	0.07	—	9,012
Dust From Material Movement	—	—	—	—	—	—	9.35	9.35	—	4.47	4.47	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	7.80	6.56	60.7	52.4	0.08	3.10	—	3.10	2.85	—	2.85	—	8,981	8,981	0.36	0.07	—	9,012
Dust From Material Movement	—	—	—	—	—	—	9.35	9.35	—	4.47	4.47	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.07	0.90	8.32	7.18	0.01	0.42	—	0.42	0.39	—	0.39	—	1,230	1,230	0.05	0.01	—	1,235
Dust From Material Movement	—	—	—	—	—	—	1.28	1.28	—	0.61	0.61	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.20	0.16	1.52	1.31	< 0.005	0.08	—	0.08	0.07	—	0.07	—	204	204	0.01	< 0.005	—	204
Dust From Material Movement	—	—	—	—	—	—	0.23	0.23	—	0.11	0.11	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.17	0.15	0.14	2.33	0.00	0.00	0.37	0.37	0.00	0.09	0.09	—	408	408	0.02	0.01	1.49	414
Vendor	0.03	0.03	0.74	0.33	0.01	0.01	0.20	0.21	0.01	0.05	0.06	—	733	733	< 0.005	0.10	2.00	764
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.14	0.13	0.15	1.56	0.00	0.00	0.37	0.37	0.00	0.09	0.09	—	362	362	0.02	0.01	0.04	366
Vendor	0.03	0.03	0.79	0.33	0.01	0.01	0.20	0.21	0.01	0.05	0.06	—	733	733	< 0.005	0.10	0.05	763

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	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	0.02	0.02	0.02	0.24	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	51.0	51.0	< 0.005	< 0.005	0.09	51.7
Vendor	< 0.005	< 0.005	0.11	0.04	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	100	100	< 0.005	0.01	0.12	105
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	8.44	8.44	< 0.005	< 0.005	0.01	8.56
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	16.6	16.6	< 0.005	< 0.005	0.02	17.3
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.3. Grading (2025) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	7.15	6.01	55.0	49.7	0.10	2.56	—	2.56	2.36	—	2.36	—	11,046	11,046	0.45	0.09	—	11,084
Dust From Material Movement	—	—	—	—	—	—	4.92	4.92	—	1.91	1.91	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	7.15	6.01	55.0	49.7	0.10	2.56	—	2.56	2.36	—	2.36	—	11,046	11,046	0.45	0.09	—	11,084
Dust From Material Movement	—	—	—	—	—	—	4.92	4.92	—	1.91	1.91	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	2.35	1.98	18.1	16.4	0.03	0.84	—	0.84	0.77	—	0.77	—	3,632	3,632	0.15	0.03	—	3,644
Dust From Material Movement	—	—	—	—	—	—	1.62	1.62	—	0.63	0.63	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.43	0.36	3.30	2.98	0.01	0.15	—	0.15	0.14	—	0.14	—	601	601	0.02	< 0.005	—	603
Dust From Material Movement	—	—	—	—	—	—	0.30	0.30	—	0.11	0.11	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.20	0.18	0.16	2.74	0.00	0.00	0.43	0.43	0.00	0.10	0.10	—	481	481	0.02	0.02	1.76	488

Vendor	0.07	0.07	1.78	0.78	0.01	0.02	0.47	0.50	0.02	0.13	0.15	—	1,752	1,752	< 0.005	0.23	4.79	1,827
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.16	0.15	0.17	1.84	0.00	0.00	0.43	0.43	0.00	0.10	0.10	—	426	426	0.02	0.02	0.05	432
Vendor	0.07	0.06	1.88	0.79	0.01	0.02	0.47	0.50	0.02	0.13	0.15	—	1,754	1,754	< 0.005	0.23	0.12	1,824
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.06	0.68	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	144	144	0.01	0.01	0.25	146
Vendor	0.02	0.02	0.62	0.26	< 0.005	0.01	0.15	0.16	0.01	0.04	0.05	—	576	576	< 0.005	0.08	0.68	600
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	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	0.12	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	23.9	23.9	< 0.005	< 0.005	0.04	24.2
Vendor	< 0.005	< 0.005	0.11	0.05	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	95.4	95.4	< 0.005	0.01	0.11	99.3
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Building Construction (2025) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.68	2.24	20.8	25.3	0.05	0.85	—	0.85	0.78	—	0.78	—	4,818	4,818	0.20	0.04	—	4,834

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.34	0.29	2.64	3.22	0.01	0.11	—	0.11	0.10	—	0.10	—	613	613	0.02	< 0.005	—	615
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.05	0.48	0.59	< 0.005	0.02	—	0.02	0.02	—	0.02	—	101	101	< 0.005	< 0.005	—	102
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	7.30	6.54	7.75	81.5	0.00	0.00	19.1	19.1	0.00	4.48	4.48	—	18,877	18,877	0.92	0.73	2.02	19,118
Vendor	0.60	0.56	16.8	7.09	0.12	0.22	4.21	4.43	0.22	1.16	1.38	—	15,689	15,689	0.03	2.10	1.11	16,317
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	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	0.94	0.84	1.07	11.6	0.00	0.00	2.41	2.41	0.00	0.56	0.56	—	2,472	2,472	0.12	0.09	4.28	2,507
Vendor	0.08	0.08	2.14	0.89	0.02	0.03	0.53	0.56	0.03	0.15	0.18	—	1,994	1,994	< 0.005	0.27	2.35	2,076
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.17	0.15	0.19	2.12	0.00	0.00	0.44	0.44	0.00	0.10	0.10	—	409	409	0.02	0.02	0.71	415

Vendor	0.01	0.01	0.39	0.16	< 0.005	0.01	0.10	0.10	0.01	0.03	0.03	—	330	330	< 0.005	0.04	0.39	344
Hauling	0.00	0.00	0.00	0.00	0.00	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.56	2.14	19.6	25.2	0.05	0.75	—	0.75	0.69	—	0.69	—	4,817	4,817	0.20	0.04	—	4,833
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.56	2.14	19.6	25.2	0.05	0.75	—	0.75	0.69	—	0.69	—	4,817	4,817	0.20	0.04	—	4,833
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	1.83	1.53	14.0	18.0	0.03	0.54	—	0.54	0.49	—	0.49	—	3,441	3,441	0.14	0.03	—	3,452
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.33	0.28	2.56	3.28	0.01	0.10	—	0.10	0.09	—	0.09	—	570	570	0.02	< 0.005	—	572
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	7.72	6.99	6.43	113	0.00	0.00	19.1	19.1	0.00	4.48	4.48	—	20,903	20,903	0.85	0.73	70.8	21,211
Vendor	0.67	0.61	15.3	6.46	0.12	0.22	4.21	4.43	0.22	1.16	1.38	—	15,366	15,366	0.03	2.10	38.8	16,032
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	6.95	6.19	7.09	75.1	0.00	0.00	19.1	19.1	0.00	4.48	4.48	—	18,508	18,508	0.29	0.73	1.83	18,734
Vendor	0.60	0.56	16.3	6.69	0.12	0.22	4.21	4.43	0.22	1.16	1.38	—	15,383	15,383	0.03	2.10	1.01	16,011
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.01	4.49	5.49	60.5	0.00	0.00	13.5	13.5	0.00	3.17	3.17	—	13,610	13,610	0.23	0.52	21.8	13,792
Vendor	0.44	0.41	11.5	4.72	0.09	0.16	2.99	3.14	0.16	0.83	0.98	—	10,981	10,981	0.02	1.50	12.0	11,441
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.91	0.82	1.00	11.0	0.00	0.00	2.47	2.47	0.00	0.58	0.58	—	2,253	2,253	0.04	0.09	3.61	2,283
Vendor	0.08	0.07	2.10	0.86	0.02	0.03	0.55	0.57	0.03	0.15	0.18	—	1,818	1,818	< 0.005	0.25	1.98	1,894
Hauling	0.00	0.00	0.00	0.00	0.00	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	2.46	2.06	18.7	25.1	0.05	0.67	—	0.67	0.62	—	0.62	—	4,817	4,817	0.20	0.04	—	4,833
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.46	2.06	18.7	25.1	0.05	0.67	—	0.67	0.62	—	0.62	—	4,817	4,817	0.20	0.04	—	4,833
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	1.76	1.47	13.4	18.0	0.03	0.48	—	0.48	0.44	—	0.44	—	3,440	3,440	0.14	0.03	—	3,452
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	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	0.32	0.27	2.44	3.28	0.01	0.09	—	0.09	0.08	—	0.08	—	570	570	0.02	< 0.005	—	572
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	7.33	6.64	5.77	104	0.00	0.00	19.1	19.1	0.00	4.48	4.48	—	20,543	20,543	0.23	0.69	64.0	20,819
Vendor	0.66	0.48	14.8	6.18	0.12	0.22	4.21	4.43	0.22	1.16	1.38	—	15,030	15,030	0.03	1.98	34.6	15,655
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	6.69	5.96	6.43	70.0	0.00	0.00	19.1	19.1	0.00	4.48	4.48	—	18,195	18,195	0.29	0.73	1.65	18,420
Vendor	0.59	0.43	15.7	6.42	0.12	0.22	4.21	4.43	0.22	1.16	1.38	—	15,047	15,047	0.03	1.99	0.90	15,642
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.78	4.26	5.02	55.9	0.00	0.00	13.5	13.5	0.00	3.17	3.17	—	13,378	13,378	0.21	0.52	19.7	13,558
Vendor	0.44	0.32	11.2	4.52	0.09	0.16	2.99	3.14	0.16	0.83	0.98	—	10,741	10,741	0.02	1.42	10.7	11,176
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.87	0.78	0.92	10.2	0.00	0.00	2.47	2.47	0.00	0.58	0.58	—	2,215	2,215	0.03	0.09	3.27	2,245
Vendor	0.08	0.06	2.04	0.83	0.02	0.03	0.55	0.57	0.03	0.15	0.18	—	1,778	1,778	< 0.005	0.24	1.77	1,850
Hauling	0.00	0.00	0.00	0.00	0.00	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	2.37	1.98	17.8	25.1	0.05	0.60	—	0.60	0.55	—	0.55	—	4,818	4,818	0.20	0.04	—	4,834

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.37	1.98	17.8	25.1	0.05	0.60	—	0.60	0.55	—	0.55	—	4,818	4,818	0.20	0.04	—	4,834
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	1.70	1.42	12.7	18.0	0.03	0.43	—	0.43	0.40	—	0.40	—	3,451	3,451	0.14	0.03	—	3,462
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	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	0.31	0.26	2.32	3.28	0.01	0.08	—	0.08	0.07	—	0.07	—	571	571	0.02	< 0.005	—	573
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	7.11	6.41	5.11	97.0	0.00	0.00	19.1	19.1	0.00	4.48	4.48	—	20,153	20,153	0.23	0.69	57.6	20,423
Vendor	0.63	0.47	14.3	5.92	0.12	0.22	4.21	4.43	0.22	1.16	1.38	—	14,642	14,642	0.03	1.98	30.7	15,263
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	5.83	5.70	5.77	65.0	0.00	0.00	19.1	19.1	0.00	4.48	4.48	—	17,854	17,854	0.26	0.69	1.49	18,068
Vendor	0.58	0.43	15.2	6.02	0.12	0.22	4.21	4.43	0.22	1.16	1.38	—	14,659	14,659	0.03	1.98	0.80	15,250
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.22	4.13	4.58	52.0	0.00	0.00	13.6	13.6	0.00	3.18	3.18	—	13,163	13,163	0.18	0.50	17.8	13,333
Vendor	0.44	0.32	10.8	4.25	0.09	0.16	2.99	3.15	0.16	0.83	0.99	—	10,492	10,492	0.02	1.42	9.47	10,925
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.77	0.75	0.84	9.50	0.00	0.00	2.48	2.48	0.00	0.58	0.58	—	2,179	2,179	0.03	0.08	2.95	2,207
Vendor	0.08	0.06	1.97	0.78	0.02	0.03	0.55	0.58	0.03	0.15	0.18	—	1,737	1,737	< 0.005	0.23	1.57	1,809
Hauling	0.00	0.00	0.00	0.00	0.00	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	2.31	1.93	17.1	25.0	0.05	0.55	—	0.55	0.51	—	0.51	—	4,816	4,816	0.20	0.04	—	4,833
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	2.31	1.93	17.1	25.0	0.05	0.55	—	0.55	0.51	—	0.51	—	4,816	4,816	0.20	0.04	—	4,833
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	1.59	1.33	11.7	17.2	0.03	0.38	—	0.38	0.35	—	0.35	—	3,308	3,308	0.13	0.03	—	3,320
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	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	0.24	2.14	3.14	0.01	0.07	—	0.07	0.06	—	0.06	—	548	548	0.02	< 0.005	—	550
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	6.16	6.06	5.08	90.4	0.00	0.00	19.1	19.1	0.00	4.48	4.48	—	19,787	19,787	0.23	0.69	51.6	20,051
Vendor	0.63	0.47	13.8	5.64	0.12	0.22	4.21	4.43	0.22	1.16	1.38	—	14,233	14,233	0.03	1.87	26.9	14,817
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.54	4.82	5.11	60.6	0.00	0.00	19.1	19.1	0.00	4.48	4.48	—	17,534	17,534	0.26	0.69	1.34	17,748
Vendor	0.57	0.41	14.7	5.86	0.12	0.22	4.21	4.43	0.22	1.16	1.38	—	14,250	14,250	0.03	1.87	0.70	14,808
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.85	3.76	3.94	46.5	0.00	0.00	13.0	13.0	0.00	3.05	3.05	—	12,396	12,396	0.18	0.48	15.3	12,557
Vendor	0.41	0.30	10.0	3.96	0.08	0.15	2.87	3.02	0.15	0.79	0.95	—	9,781	9,781	0.02	1.28	7.98	10,172
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.70	0.69	0.72	8.48	0.00	0.00	2.38	2.38	0.00	0.56	0.56	—	2,052	2,052	0.03	0.08	2.53	2,079
Vendor	0.07	0.05	1.83	0.72	0.02	0.03	0.52	0.55	0.03	0.14	0.17	—	1,619	1,619	< 0.005	0.21	1.32	1,684
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.15. Paving (2028) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.82	0.69	6.63	9.91	0.01	0.26	—	0.26	0.24	—	0.24	—	1,511	1,511	0.06	0.01	—	1,516
Paving	1.15	1.15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.82	0.69	6.63	9.91	0.01	0.26	—	0.26	0.24	—	0.24	—	1,511	1,511	0.06	0.01	—	1,516
Paving	1.15	1.15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.18	0.15	1.44	2.15	< 0.005	0.06	—	0.06	0.05	—	0.05	—	328	328	0.01	< 0.005	—	329
Paving	0.25	0.25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.26	0.39	< 0.005	0.01	—	0.01	0.01	—	0.01	—	54.3	54.3	< 0.005	< 0.005	—	54.5
Paving	0.05	0.05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.05	1.00	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	207	207	< 0.005	0.01	0.59	210
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	0.06	0.06	0.06	0.67	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	183	183	< 0.005	0.01	0.02	185
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	0.01	0.01	0.01	0.16	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	41.0	41.0	< 0.005	< 0.005	0.06	41.5
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.78	6.78	< 0.005	< 0.005	0.01	6.87
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

3.17. Paving (2029) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.80	0.67	6.46	9.92	0.01	0.24	—	0.24	0.22	—	0.22	—	1,511	1,511	0.06	0.01	—	1,516
Paving	1.15	1.15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.80	0.67	6.46	9.92	0.01	0.24	—	0.24	0.22	—	0.22	—	1,511	1,511	0.06	0.01	—	1,516
Paving	1.15	1.15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	0.55	0.46	4.44	6.81	0.01	0.16	—	0.16	0.15	—	0.15	—	1,038	1,038	0.04	0.01	—	1,041
Paving	0.79	0.79	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.08	0.81	1.24	< 0.005	0.03	—	0.03	0.03	—	0.03	—	172	172	0.01	< 0.005	—	172
Paving	0.14	0.14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.05	0.93	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	203	203	< 0.005	0.01	0.53	206
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	0.06	0.05	0.05	0.62	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	180	180	< 0.005	0.01	0.01	182
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	0.04	0.04	0.04	0.48	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	127	127	< 0.005	< 0.005	0.16	129
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	0.09	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	21.1	21.1	< 0.005	< 0.005	0.03	21.3
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

3.19. Architectural Coating (2027) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.18	0.15	1.11	1.50	< 0.005	0.03	—	0.03	0.02	—	0.02	—	178	178	0.01	< 0.005	—	179
Architectural Coatings	27.1	27.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.18	0.15	1.11	1.50	< 0.005	0.03	—	0.03	0.02	—	0.02	—	178	178	0.01	< 0.005	—	179
Architectural Coatings	27.1	27.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.45	0.61	< 0.005	0.01	—	0.01	0.01	—	0.01	—	72.1	72.1	< 0.005	< 0.005	—	72.4
Architectural Coatings	11.0	11.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.08	0.11	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	11.9	11.9	< 0.005	< 0.005	—	12.0
Architectural Coatings	2.00	2.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.46	1.33	1.15	20.8	0.00	0.00	3.82	3.82	0.00	0.89	0.89	—	4,103	4,103	0.05	0.14	12.8	4,158
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	1.34	1.19	1.28	14.0	0.00	0.00	3.82	3.82	0.00	0.89	0.89	—	3,634	3,634	0.06	0.14	0.33	3,679

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	0.54	0.48	0.57	6.34	0.00	0.00	1.53	1.53	0.00	0.36	0.36	—	1,515	1,515	0.02	0.06	2.24	1,536
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	0.10	0.09	0.10	1.16	0.00	0.00	0.28	0.28	0.00	0.07	0.07	—	251	251	< 0.005	0.01	0.37	254
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. Architectural Coating (2028) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	0.14	1.08	1.49	< 0.005	0.02	—	0.02	0.02	—	0.02	—	178	178	0.01	< 0.005	—	179
Architectural Coatings	27.1	27.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.17	0.14	1.08	1.49	< 0.005	0.02	—	0.02	0.02	—	0.02	—	178	178	0.01	< 0.005	—	179
Architectural Coatings	27.1	27.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.77	1.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	128	128	0.01	< 0.005	—	128
Architectural Coatings	19.4	19.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.14	0.19	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	21.1	21.1	< 0.005	< 0.005	—	21.2
Architectural Coatings	3.54	3.54	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.42	1.28	1.02	19.4	0.00	0.00	3.82	3.82	0.00	0.89	0.89	—	4,025	4,025	0.05	0.14	11.5	4,079
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	1.17	1.14	1.15	13.0	0.00	0.00	3.82	3.82	0.00	0.89	0.89	—	3,566	3,566	0.05	0.14	0.30	3,609
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	0.84	0.83	0.92	10.4	0.00	0.00	2.71	2.71	0.00	0.64	0.64	—	2,629	2,629	0.04	0.10	3.56	2,663
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	0.15	0.15	0.17	1.90	0.00	0.00	0.49	0.49	0.00	0.12	0.12	—	435	435	0.01	0.02	0.59	441
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 (2029) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	0.14	1.06	1.48	< 0.005	0.02	—	0.02	0.02	—	0.02	—	178	178	0.01	< 0.005	—	179
Architectural Coatings	27.1	27.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	0.14	1.06	1.48	< 0.005	0.02	—	0.02	0.02	—	0.02	—	178	178	0.01	< 0.005	—	179
Architectural Coatings	27.1	27.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.73	1.02	< 0.005	0.01	—	0.01	0.01	—	0.01	—	122	122	< 0.005	< 0.005	—	123
Architectural Coatings	18.6	18.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.13	0.19	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	20.2	20.2	< 0.005	< 0.005	—	20.3
Architectural Coatings	3.40	3.40	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.23	1.21	1.01	18.0	0.00	0.00	3.82	3.82	0.00	0.89	0.89	—	3,952	3,952	0.05	0.14	10.3	4,005
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	1.11	0.96	1.02	12.1	0.00	0.00	3.82	3.82	0.00	0.89	0.89	—	3,502	3,502	0.05	0.14	0.27	3,545
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	0.77	0.75	0.79	9.28	0.00	0.00	2.60	2.60	0.00	0.61	0.61	—	2,476	2,476	0.04	0.10	3.05	2,508
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	0.14	0.14	0.14	1.69	0.00	0.00	0.47	0.47	0.00	0.11	0.11	—	410	410	0.01	0.02	0.51	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

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

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

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

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

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

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

Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	3/4/2025	5/12/2025	5.00	50.0	—
Grading	Grading	5/13/2025	10/27/2025	5.00	120	—
Building Construction	Building Construction	10/28/2025	12/17/2029	5.00	1,080	—
Paving	Paving	9/12/2028	12/17/2029	5.00	330	—
Architectural Coating	Architectural Coating	6/8/2027	12/17/2029	5.00	660	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Average	5.00	8.00	367	0.40
Site Preparation	Crawler Tractors	Diesel	Average	6.00	8.00	87.0	0.43
Grading	Graders	Diesel	Average	2.00	8.00	148	0.41
Grading	Excavators	Diesel	Average	3.00	8.00	36.0	0.38
Grading	Scrapers	Diesel	Average	3.00	8.00	423	0.48
Grading	Rubber Tired Dozers	Diesel	Average	2.00	8.00	367	0.40
Grading	Crawler Tractors	Diesel	Average	3.00	8.00	87.0	0.43
Building Construction	Forklifts	Diesel	Average	5.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	2.00	8.00	14.0	0.74
Building Construction	Cranes	Diesel	Average	2.00	8.00	367	0.29
Building Construction	Welders	Diesel	Average	2.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	5.00	8.00	84.0	0.37
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42

Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	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
Site Preparation	—	—	—	—
Site Preparation	Worker	28.0	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	23.0	10.2	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	33.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	55.0	10.2	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	1,462	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	492	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	—	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT

Architectural Coating	—	—	—	—
Architectural Coating	Worker	292	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	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	5,221,104	1,740,368	377,465

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	—	—	275	0.00	—
Grading	—	—	780	0.00	—
Paving	0.00	0.00	0.00	0.00	144

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	3	74%	74%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
General Heavy Industry	0.00	0%
Refrigerated Warehouse-No Rail	0.00	0%
Unrefrigerated Warehouse-No Rail	0.00	0%
Parking Lot	31.7	100%
Other Asphalt Surfaces	113	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2025	0.00	532	0.03	< 0.005
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

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	34.9	annual days of extreme heat
Extreme Precipitation	1.05	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.99	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A

Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	80.0
AQ-PM	7.52
AQ-DPM	21.9
Drinking Water	34.9
Lead Risk Housing	27.7
Pesticides	0.00
Toxic Releases	37.1
Traffic	59.7
Effect Indicators	—
CleanUp Sites	52.1
Groundwater	44.8
Haz Waste Facilities/Generators	16.6
Impaired Water Bodies	51.2
Solid Waste	84.7
Sensitive Population	—
Asthma	88.0
Cardio-vascular	89.5
Low Birth Weights	91.9
Socioeconomic Factor Indicators	—
Education	26.9
Housing	11.6
Linguistic	—

Poverty	52.5
Unemployment	90.6

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	44.97626075
Employed	30.46323624
Median HI	35.0442705
Education	—
Bachelor's or higher	42.93596818
High school enrollment	100
Preschool enrollment	39.79212113
Transportation	—
Auto Access	85.40998332
Active commuting	24.00872578
Social	—
2-parent households	51.18696266
Voting	75.34967278
Neighborhood	—
Alcohol availability	88.37418196
Park access	16.65597331
Retail density	8.469138971
Supermarket access	2.399589375
Tree canopy	0.71859361
Housing	—
Homeownership	62.60746824

Housing habitability	64.39112024
Low-inc homeowner severe housing cost burden	17.8108559
Low-inc renter severe housing cost burden	77.19748492
Uncrowded housing	68.66418581
Health Outcomes	—
Insured adults	64.22430386
Arthritis	4.4
Asthma ER Admissions	7.6
High Blood Pressure	8.9
Cancer (excluding skin)	9.1
Asthma	30.0
Coronary Heart Disease	6.8
Chronic Obstructive Pulmonary Disease	13.3
Diagnosed Diabetes	35.6
Life Expectancy at Birth	34.2
Cognitively Disabled	41.3
Physically Disabled	11.3
Heart Attack ER Admissions	2.7
Mental Health Not Good	48.5
Chronic Kidney Disease	20.1
Obesity	46.5
Pedestrian Injuries	48.3
Physical Health Not Good	39.9
Stroke	15.1
Health Risk Behaviors	—
Binge Drinking	57.0
Current Smoker	46.7
No Leisure Time for Physical Activity	58.0

Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	58.1
Elderly	16.8
English Speaking	81.5
Foreign-born	11.0
Outdoor Workers	47.0
Climate Change Adaptive Capacity	—
Impervious Surface Cover	90.2
Traffic Density	37.9
Traffic Access	23.0
Other Indices	—
Hardship	32.7
Other Decision Support	—
2016 Voting	75.3

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	65.0
Healthy Places Index Score for Project Location (b)	46.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Total Project area is 224.90 acres
Construction: Construction Phases	Construction schedule adjusted based on the 2029 Opening Year
Construction: Off-Road Equipment	Construction equipment adjusted based on changes made to the schedule
Construction: Trips and VMT	Vendor Trips adjusted based on CalEEMod defaults for Building Construction and number of days for Site Preparation, Grading, and Building Construction

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APPENDIX 4.2:

CALEEMOD OPERATIONAL EMISSIONS MODEL OUTPUTS

Lake Creek Logistics Center (Operations - Unmitigated) Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Lake Creek Logistics Center (Operations - Unmitigated)
Operational Year	2029
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	5.00
Precipitation (days)	12.4
Location	34.57509227224038, -117.17721847885088
County	San Bernardino-Mojave Desert
City	Apple Valley
Air District	Mojave Desert AQMD
Air Basin	Mojave Desert
TAZ	5160
EDFZ	10
Electric Utility	Southern California Edison
Gas Utility	Southwest Gas Corp.
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
General Heavy Industry	348	1000sqft	7.99	348,074	0.00	—	—	General Light Industrial PC

User Defined Industrial	348	User Defined Unit	0.00	0.00	0.00	—	—	General Light Industrial Trucks
Refrigerated Warehouse-No Rail	348	1000sqft	7.99	348,074	0.00	—	—	High Cube Cold PC
User Defined Industrial	348	User Defined Unit	0.00	0.00	0.00	—	—	High Cube Cold Trucks
Unrefrigerated Warehouse-No Rail	2,785	1000sqft	64.5	2,784,588	24,966	—	—	High Cube Fulfillment PC
User Defined Industrial	2,785	User Defined Unit	0.00	0.00	0.00	—	—	High Cube Fulfillment Trucks
Parking Lot	4,597	Space	31.7	0.00	0.00	—	—	—
Other Asphalt Surfaces	4,911	1000sqft	113	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.	144	138	154	516	2.10	3.68	121	125	3.47	31.2	34.7	3,362	246,095	249,457	345	26.0	9,887	275,720
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	114	111	162	285	2.02	3.42	121	124	3.27	31.2	34.5	3,362	237,619	240,981	345	26.1	9,380	266,778
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unmit.	117	114	118	297	1.49	2.50	87.8	90.3	2.36	22.7	25.0	3,362	182,460	185,822	345	20.2	9,531	209,999
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	21.4	20.8	21.5	54.1	0.27	0.46	16.0	16.5	0.43	4.14	4.57	557	30,208	30,765	57.1	3.35	1,578	34,768

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	35.1	31.8	149	361	2.09	3.20	121	124	3.05	31.2	34.3	—	216,596	216,596	2.68	21.9	521	223,703
Area	107	105	1.27	151	0.01	0.27	—	0.27	0.20	—	0.20	—	623	623	0.03	0.01	—	625
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	23,723	23,723	2.26	0.27	—	23,861
Water	—	—	—	—	—	—	—	—	—	—	—	1,542	4,398	5,941	159	3.81	—	11,040
Waste	—	—	—	—	—	—	—	—	—	—	—	1,820	0.00	1,820	182	0.00	—	6,366
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9,367	9,367
Stationary	1.62	1.48	4.13	3.77	0.01	0.22	0.00	0.22	0.22	0.00	0.22	0.00	756	756	0.03	0.01	0.00	758
Total	144	138	154	516	2.10	3.68	121	125	3.47	31.2	34.7	3,362	246,095	249,457	345	26.0	9,887	275,720
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	32.5	29.3	158	281	2.01	3.20	121	124	3.05	31.2	34.3	—	208,742	208,742	2.76	22.0	13.5	215,386
Area	79.9	79.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	23,723	23,723	2.26	0.27	—	23,861
Water	—	—	—	—	—	—	—	—	—	—	—	1,542	4,398	5,941	159	3.81	—	11,040
Waste	—	—	—	—	—	—	—	—	—	—	—	1,820	0.00	1,820	182	0.00	—	6,366
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9,367	9,367
Stationary	1.62	1.48	4.13	3.77	0.01	0.22	0.00	0.22	0.22	0.00	0.22	0.00	756	756	0.03	0.01	0.00	758

Total	114	111	162	285	2.02	3.42	121	124	3.27	31.2	34.5	3,362	237,619	240,981	345	26.1	9,380	266,778
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	23.9	21.5	117	221	1.48	2.34	87.8	90.2	2.23	22.7	24.9	—	153,928	153,928	2.04	16.1	164	158,953
Area	93.2	92.1	0.63	74.7	< 0.005	0.13	—	0.13	0.10	—	0.10	—	307	307	0.01	< 0.005	—	308
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	23,723	23,723	2.26	0.27	—	23,861
Water	—	—	—	—	—	—	—	—	—	—	—	1,542	4,398	5,941	159	3.81	—	11,040
Waste	—	—	—	—	—	—	—	—	—	—	—	1,820	0.00	1,820	182	0.00	—	6,366
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9,367	9,367
Stationary	0.22	0.20	0.57	0.52	< 0.005	0.03	0.00	0.03	0.03	0.00	0.03	0.00	104	104	< 0.005	< 0.005	0.00	104
Total	117	114	118	297	1.49	2.50	87.8	90.3	2.36	22.7	25.0	3,362	182,460	185,822	345	20.2	9,531	209,999
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	4.37	3.93	21.3	40.4	0.27	0.43	16.0	16.5	0.41	4.14	4.54	—	25,485	25,485	0.34	2.67	27.2	26,316
Area	17.0	16.8	0.11	13.6	< 0.005	0.02	—	0.02	0.02	—	0.02	—	50.8	50.8	< 0.005	< 0.005	—	51.0
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	3,928	3,928	0.37	0.05	—	3,950
Water	—	—	—	—	—	—	—	—	—	—	—	255	728	984	26.3	0.63	—	1,828
Waste	—	—	—	—	—	—	—	—	—	—	—	301	0.00	301	30.1	0.00	—	1,054
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,551	1,551
Stationary	0.04	0.04	0.10	0.09	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	17.1	17.1	< 0.005	< 0.005	0.00	17.2
Total	21.4	20.8	21.5	54.1	0.27	0.46	16.0	16.5	0.43	4.14	4.57	557	30,208	30,765	57.1	3.35	1,578	34,768

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	7.12	6.53	3.45	74.8	0.17	0.06	16.6	16.7	0.06	4.19	4.25	—	16,844	16,844	0.54	0.37	40.1	17,008
User Defined Industrial	4.26	3.56	134	37.6	1.37	2.93	49.0	51.9	2.81	13.1	15.9	—	143,691	143,691	0.34	20.3	347	150,087
Refrigerated Warehouse-No Rail	2.12	1.94	1.03	22.2	0.05	0.02	4.95	4.96	0.02	1.25	1.26	—	5,007	5,007	0.16	0.11	11.9	5,056
Unrefrigerated Warehouse-No Rail	21.6	19.8	10.5	227	0.50	0.19	50.4	50.6	0.17	12.7	12.9	—	51,054	51,054	1.64	1.13	122	51,552
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	35.1	31.8	149	361	2.09	3.20	121	124	3.05	31.2	34.3	—	216,596	216,596	2.68	21.9	521	223,703
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	6.57	5.98	3.83	56.3	0.15	0.06	16.6	16.7	0.06	4.19	4.25	—	15,017	15,017	0.56	0.40	1.04	15,150
User Defined Industrial	4.07	3.40	141	37.8	1.37	2.93	49.0	51.9	2.81	13.1	15.9	—	143,747	143,747	0.33	20.3	9.01	149,811

Refrigerated Wareho Rail	1.95	1.78	1.14	16.7	0.04	0.02	4.95	4.96	0.02	1.25	1.26	—	4,464	4,464	0.17	0.12	0.31	4,504
Unrefrigerated Warehouse-No Rail	19.9	18.1	11.6	171	0.45	0.19	50.4	50.6	0.17	12.7	12.9	—	45,515	45,515	1.70	1.21	3.15	45,921
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	32.5	29.3	158	281	2.01	3.20	121	124	3.05	31.2	34.3	—	208,742	208,742	2.76	22.0	13.5	215,386
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.88	0.80	0.53	8.18	0.02	0.01	2.20	2.21	0.01	0.55	0.56	—	1,868	1,868	0.07	0.05	2.10	1,887
User Defined Industrial	0.55	0.46	19.0	5.00	0.18	0.39	6.50	6.89	0.37	1.74	2.11	—	17,398	17,398	0.04	2.46	18.1	18,149
Refrigerated Warehouse-No Rail	0.26	0.24	0.16	2.43	0.01	< 0.005	0.65	0.66	< 0.005	0.16	0.17	—	555	555	0.02	0.01	0.62	561
Unrefrigerated Warehouse-No Rail	2.67	2.43	1.62	24.8	0.06	0.02	6.67	6.70	0.02	1.68	1.70	—	5,663	5,663	0.21	0.15	6.35	5,719
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	4.37	3.93	21.3	40.4	0.27	0.43	16.0	16.5	0.41	4.14	4.54	—	25,485	25,485	0.34	2.67	27.2	26,316

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	3,149	3,149	0.30	0.04	—	3,167
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	7,229	7,229	0.69	0.08	—	7,271
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	12,199	12,199	1.16	0.14	—	12,270
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	1,147	1,147	0.11	0.01	—	1,153
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	23,723	23,723	2.26	0.27	—	23,861
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	3,149	3,149	0.30	0.04	—	3,167
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	7,229	7,229	0.69	0.08	—	7,271
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	12,199	12,199	1.16	0.14	—	12,270
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	1,147	1,147	0.11	0.01	—	1,153
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	23,723	23,723	2.26	0.27	—	23,861
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	521	521	0.05	0.01	—	524
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	1,197	1,197	0.11	0.01	—	1,204

Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	2,020	2,020	0.19	0.02	—	2,031
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	190	190	0.02	< 0.005	—	191
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	3,928	3,928	0.37	0.05	—	3,950

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
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
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
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
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
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
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
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
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
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

Refrigerated	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
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
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.3. Area Emissions by Source

4.3.1. Unmitigated

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

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	75.0	75.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	4.90	4.90	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	26.9	24.9	1.27	151	0.01	0.27	—	0.27	0.20	—	0.20	—	623	623	0.03	0.01	—	625
Total	107	105	1.27	151	0.01	0.27	—	0.27	0.20	—	0.20	—	623	623	0.03	0.01	—	625

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	75.0	75.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	4.90	4.90	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	79.9	79.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	13.7	13.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.89	0.89	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	2.43	2.24	0.11	13.6	< 0.005	0.02	—	0.02	0.02	—	0.02	—	50.8	50.8	< 0.005	< 0.005	—	51.0
Total	17.0	16.8	0.11	13.6	< 0.005	0.02	—	0.02	0.02	—	0.02	—	50.8	50.8	< 0.005	< 0.005	—	51.0

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

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

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

General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	154	440	594	15.9	0.38	—	1,104
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	154	440	594	15.9	0.38	—	1,104
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	1,234	3,519	4,753	127	3.05	—	8,832
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1,542	4,398	5,941	159	3.81	—	11,040
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	154	440	594	15.9	0.38	—	1,104
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	154	440	594	15.9	0.38	—	1,104

Unrefrigerated Wareho Rail	—	—	—	—	—	—	—	—	—	—	—	1,234	3,519	4,753	127	3.05	—	8,832
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1,542	4,398	5,941	159	3.81	—	11,040
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	25.5	72.8	98.3	2.63	0.06	—	183
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	25.5	72.8	98.3	2.63	0.06	—	183
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	204	583	787	21.0	0.50	—	1,462
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	255	728	984	26.3	0.63	—	1,828

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	233	0.00	233	23.2	0.00	—	814
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	176	0.00	176	17.6	0.00	—	617
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	1,411	0.00	1,411	141	0.00	—	4,935
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1,820	0.00	1,820	182	0.00	—	6,366
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	233	0.00	233	23.2	0.00	—	814

User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	176	0.00	176	17.6	0.00	—	617
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	1,411	0.00	1,411	141	0.00	—	4,935
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1,820	0.00	1,820	182	0.00	—	6,366
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	38.5	0.00	38.5	3.85	0.00	—	135
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	29.2	0.00	29.2	2.92	0.00	—	102
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	234	0.00	234	23.3	0.00	—	817
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	301	0.00	301	30.1	0.00	—	1,054

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	90.6	90.6
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9,276	9,276
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9,367	9,367
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	90.6	90.6
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9,276	9,276
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9,367	9,367

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15.0	15.0
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,536	1,536
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,551	1,551

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

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

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

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

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

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	1.62	1.48	4.13	3.77	0.01	0.22	0.00	0.22	0.22	0.00	0.22	0.00	756	756	0.03	0.01	0.00	758
Total	1.62	1.48	4.13	3.77	0.01	0.22	0.00	0.22	0.22	0.00	0.22	0.00	756	756	0.03	0.01	0.00	758
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	1.62	1.48	4.13	3.77	0.01	0.22	0.00	0.22	0.22	0.00	0.22	0.00	756	756	0.03	0.01	0.00	758
Total	1.62	1.48	4.13	3.77	0.01	0.22	0.00	0.22	0.22	0.00	0.22	0.00	756	756	0.03	0.01	0.00	758
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.04	0.04	0.10	0.09	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	17.1	17.1	< 0.005	< 0.005	0.00	17.2
Total	0.04	0.04	0.10	0.09	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	17.1	17.1	< 0.005	< 0.005	0.00	17.2

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

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

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

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

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

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

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

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

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

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

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Remove	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
General Heavy Industry	1,608	136	54.4	429,158	24,008	2,031	812	6,407,471
User Defined Industrial	90.0	7.62	3.06	24,025	3,600	305	123	960,984
Refrigerated Warehouse-No Rail	478	40.4	16.2	127,577	7,137	604	242	1,904,769
User Defined Industrial	264	22.3	8.95	70,464	10,561	894	358	2,818,556
Unrefrigerated Warehouse-No Rail	4,874	412	165	1,300,785	72,768	6,157	2,461	19,421,177

User Defined Industrial	1,056	89.4	35.6	281,812	42,237	3,575	1,426	11,272,466
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	5,221,104	1,740,368	377,465

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 Heavy Industry	3,319,833	346	0.0330	0.0040	0.00
User Defined Industrial	0.00	346	0.0330	0.0040	0.00

Refrigerated Warehouse-No Rail	7,621,233	346	0.0330	0.0040	0.00
User Defined Industrial	0.00	346	0.0330	0.0040	0.00
Unrefrigerated Warehouse-No Rail	12,861,185	346	0.0330	0.0040	0.00
User Defined Industrial	0.00	346	0.0330	0.0040	0.00
Parking Lot	1,208,863	346	0.0330	0.0040	0.00
Other Asphalt Surfaces	0.00	346	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
General Heavy Industry	80,492,113	0.00
User Defined Industrial	0.00	0.00
Refrigerated Warehouse-No Rail	80,492,113	0.00
User Defined Industrial	0.00	0.00
Unrefrigerated Warehouse-No Rail	643,935,975	552,711
User Defined Industrial	0.00	0.00
Parking Lot	0.00	0.00
Other Asphalt Surfaces	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
General Heavy Industry	432	—
User Defined Industrial	0.00	—
Refrigerated Warehouse-No Rail	327	—

User Defined Industrial	0.00	—
Unrefrigerated Warehouse-No Rail	2,618	—
User Defined Industrial	0.00	—
Parking Lot	0.00	—
Other Asphalt Surfaces	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
General Heavy Industry	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0
Refrigerated Warehouse-No Rail	Cold storage	R-404A	3,922	7.50	7.50	7.50	25.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
Emergency Generator	Diesel	1.00	1.00	50.0	300	0.73
Emergency Generator	Diesel	1.00	1.00	50.0	300	0.73
Emergency Generator	Diesel	1.00	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	34.9	annual days of extreme heat
Extreme Precipitation	1.05	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.99	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	80.0
AQ-PM	7.52
AQ-DPM	21.9
Drinking Water	34.9
Lead Risk Housing	27.7

Pesticides	0.00
Toxic Releases	37.1
Traffic	59.7
Effect Indicators	—
CleanUp Sites	52.1
Groundwater	44.8
Haz Waste Facilities/Generators	16.6
Impaired Water Bodies	51.2
Solid Waste	84.7
Sensitive Population	—
Asthma	88.0
Cardio-vascular	89.5
Low Birth Weights	91.9
Socioeconomic Factor Indicators	—
Education	26.9
Housing	11.6
Linguistic	—
Poverty	52.5
Unemployment	90.6

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	44.97626075
Employed	30.46323624
Median HI	35.0442705
Education	—

Bachelor's or higher	42.93596818
High school enrollment	100
Preschool enrollment	39.79212113
Transportation	—
Auto Access	85.40998332
Active commuting	24.00872578
Social	—
2-parent households	51.18696266
Voting	75.34967278
Neighborhood	—
Alcohol availability	88.37418196
Park access	16.65597331
Retail density	8.469138971
Supermarket access	2.399589375
Tree canopy	0.71859361
Housing	—
Homeownership	62.60746824
Housing habitability	64.39112024
Low-inc homeowner severe housing cost burden	17.8108559
Low-inc renter severe housing cost burden	77.19748492
Uncrowded housing	68.66418581
Health Outcomes	—
Insured adults	64.22430386
Arthritis	4.4
Asthma ER Admissions	7.6
High Blood Pressure	8.9
Cancer (excluding skin)	9.1
Asthma	30.0

Coronary Heart Disease	6.8
Chronic Obstructive Pulmonary Disease	13.3
Diagnosed Diabetes	35.6
Life Expectancy at Birth	34.2
Cognitively Disabled	41.3
Physically Disabled	11.3
Heart Attack ER Admissions	2.7
Mental Health Not Good	48.5
Chronic Kidney Disease	20.1
Obesity	46.5
Pedestrian Injuries	48.3
Physical Health Not Good	39.9
Stroke	15.1
Health Risk Behaviors	—
Binge Drinking	57.0
Current Smoker	46.7
No Leisure Time for Physical Activity	58.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	58.1
Elderly	16.8
English Speaking	81.5
Foreign-born	11.0
Outdoor Workers	47.0
Climate Change Adaptive Capacity	—
Impervious Surface Cover	90.2
Traffic Density	37.9

Traffic Access	23.0
Other Indices	—
Hardship	32.7
Other Decision Support	—
2016 Voting	75.3

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	65.0
Healthy Places Index Score for Project Location (b)	46.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Total Project area is 224.90 acres
Construction: Construction Phases	Construction schedule adjusted based on the 2029 Opening Year
Construction: Off-Road Equipment	Construction equipment adjusted based on changes made to the schedule

Construction: Trips and VMT	Vendor Trips adjusted based on CalEEMod defaults for Building Construction and number of days for Site Preparation, Grading, and Building Construction
Operations: Vehicle Data	Trip characteristics based on information provided in the Traffic analysis
Operations: Fleet Mix	Passenger Car Mix estimated based on the CalEEMod default fleet mix and the ratio of the vehicle classes (LDA, LDT1, LDT2, MDV, & MCY). Truck Mix based on information in the Traffic analysis
Operations: Energy Use	No natural gas for building envelope

Lake Creek Logistics Center (Operations - Mitigated) Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Lake Creek Logistics Center (Operations - Mitigated)
Operational Year	2029
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	5.00
Precipitation (days)	12.4
Location	34.57509227224038, -117.17721847885088
County	San Bernardino-Mojave Desert
City	Apple Valley
Air District	Mojave Desert AQMD
Air Basin	Mojave Desert
TAZ	5160
EDFZ	10
Electric Utility	Southern California Edison
Gas Utility	Southwest Gas Corp.
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
General Heavy Industry	348	1000sqft	7.99	348,074	0.00	—	—	General Light Industrial PC

User Defined Industrial	348	User Defined Unit	0.00	0.00	0.00	—	—	General Light Industrial Trucks
Refrigerated Warehouse-No Rail	348	1000sqft	7.99	348,074	0.00	—	—	High Cube Cold PC
User Defined Industrial	348	User Defined Unit	0.00	0.00	0.00	—	—	High Cube Cold Trucks
Unrefrigerated Warehouse-No Rail	2,785	1000sqft	64.5	2,784,588	24,966	—	—	High Cube Fulfillment PC
User Defined Industrial	2,785	User Defined Unit	0.00	0.00	0.00	—	—	High Cube Fulfillment Trucks
Parking Lot	4,597	Space	31.7	0.00	0.00	—	—	—
Other Asphalt Surfaces	4,911	1000sqft	113	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Energy	E-2	Require Energy Efficient Appliances
Energy	E-10-B	Establish Onsite Renewable Energy Systems: Solar Power
Water	W-4	Require Low-Flow Water Fixtures
Water	W-5	Design Water-Efficient Landscapes

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.	144	138	154	516	2.10	3.68	121	125	3.47	31.2	34.7	3,362	246,894	250,256	346	26.0	9,887	276,523

Mit.	144	138	154	516	2.10	3.68	121	125	3.47	31.2	34.7	3,210	240,880	244,090	329	25.5	9,887	269,822
% Reduced	—	—	—	—	—	—	—	—	—	—	—	5%	2%	2%	5%	2%	—	2%
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	114	111	162	285	2.02	3.42	121	124	3.27	31.2	34.5	3,362	238,417	241,779	346	26.1	9,380	267,581
Mit.	114	111	162	285	2.02	3.42	121	124	3.27	31.2	34.5	3,210	232,403	235,613	329	25.7	9,380	260,880
% Reduced	—	—	—	—	—	—	—	—	—	—	—	5%	3%	3%	5%	2%	—	3%
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	117	114	118	297	1.49	2.50	87.8	90.3	2.36	22.7	25.0	3,362	183,258	186,620	345	20.2	9,531	210,802
Mit.	117	114	118	297	1.49	2.50	87.8	90.3	2.36	22.7	25.0	3,210	177,244	180,455	329	19.8	9,531	204,101
% Reduced	—	—	—	—	—	—	—	—	—	—	—	5%	3%	3%	5%	2%	—	3%
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	21.4	20.8	21.5	54.1	0.27	0.46	16.0	16.5	0.43	4.14	4.57	557	30,341	30,897	57.1	3.35	1,578	34,901
Mit.	21.4	20.8	21.5	54.1	0.27	0.46	16.0	16.5	0.43	4.14	4.57	531	29,345	29,876	54.4	3.28	1,578	33,791
% Reduced	—	—	—	—	—	—	—	—	—	—	—	5%	3%	3%	5%	2%	—	3%

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	35.1	31.8	149	361	2.09	3.20	121	124	3.05	31.2	34.3	—	216,596	216,596	2.68	21.9	521	223,703
Area	107	105	1.27	151	0.01	0.27	—	0.27	0.20	—	0.20	—	623	623	0.03	0.01	—	625

Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	24,521	24,521	2.34	0.28	—	24,664
Water	—	—	—	—	—	—	—	—	—	—	—	1,542	4,398	5,941	159	3.81	—	11,040
Waste	—	—	—	—	—	—	—	—	—	—	—	1,820	0.00	1,820	182	0.00	—	6,366
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9,367	9,367
Stationary	1.62	1.48	4.13	3.77	0.01	0.22	0.00	0.22	0.22	0.00	0.22	0.00	756	756	0.03	0.01	0.00	758
Total	144	138	154	516	2.10	3.68	121	125	3.47	31.2	34.7	3,362	246,894	250,256	346	26.0	9,887	276,523
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	32.5	29.3	158	281	2.01	3.20	121	124	3.05	31.2	34.3	—	208,742	208,742	2.76	22.0	13.5	215,386
Area	79.9	79.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	24,521	24,521	2.34	0.28	—	24,664
Water	—	—	—	—	—	—	—	—	—	—	—	1,542	4,398	5,941	159	3.81	—	11,040
Waste	—	—	—	—	—	—	—	—	—	—	—	1,820	0.00	1,820	182	0.00	—	6,366
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9,367	9,367
Stationary	1.62	1.48	4.13	3.77	0.01	0.22	0.00	0.22	0.22	0.00	0.22	0.00	756	756	0.03	0.01	0.00	758
Total	114	111	162	285	2.02	3.42	121	124	3.27	31.2	34.5	3,362	238,417	241,779	346	26.1	9,380	267,581
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	23.9	21.5	117	221	1.48	2.34	87.8	90.2	2.23	22.7	24.9	—	153,928	153,928	2.04	16.1	164	158,953
Area	93.2	92.1	0.63	74.7	< 0.005	0.13	—	0.13	0.10	—	0.10	—	307	307	0.01	< 0.005	—	308
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	24,521	24,521	2.34	0.28	—	24,664
Water	—	—	—	—	—	—	—	—	—	—	—	1,542	4,398	5,941	159	3.81	—	11,040
Waste	—	—	—	—	—	—	—	—	—	—	—	1,820	0.00	1,820	182	0.00	—	6,366
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9,367	9,367
Stationary	0.22	0.20	0.57	0.52	< 0.005	0.03	0.00	0.03	0.03	0.00	0.03	0.00	104	104	< 0.005	< 0.005	0.00	104
Total	117	114	118	297	1.49	2.50	87.8	90.3	2.36	22.7	25.0	3,362	183,258	186,620	345	20.2	9,531	210,802
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Mobile	4.37	3.93	21.3	40.4	0.27	0.43	16.0	16.5	0.41	4.14	4.54	—	25,485	25,485	0.34	2.67	27.2	26,316
Area	17.0	16.8	0.11	13.6	< 0.005	0.02	—	0.02	0.02	—	0.02	—	50.8	50.8	< 0.005	< 0.005	—	51.0
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	4,060	4,060	0.39	0.05	—	4,083
Water	—	—	—	—	—	—	—	—	—	—	—	255	728	984	26.3	0.63	—	1,828
Waste	—	—	—	—	—	—	—	—	—	—	—	301	0.00	301	30.1	0.00	—	1,054
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,551	1,551
Stationary	0.04	0.04	0.10	0.09	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	17.1	17.1	< 0.005	< 0.005	0.00	17.2
Total	21.4	20.8	21.5	54.1	0.27	0.46	16.0	16.5	0.43	4.14	4.57	557	30,341	30,897	57.1	3.35	1,578	34,901

2.6. Operations Emissions by Sector, Mitigated

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	35.1	31.8	149	361	2.09	3.20	121	124	3.05	31.2	34.3	—	216,596	216,596	2.68	21.9	521	223,703
Area	107	105	1.27	151	0.01	0.27	—	0.27	0.20	—	0.20	—	623	623	0.03	0.01	—	625
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	18,942	18,942	1.81	0.22	—	19,052
Water	—	—	—	—	—	—	—	—	—	—	—	1,390	3,964	5,354	143	3.43	—	9,951
Waste	—	—	—	—	—	—	—	—	—	—	—	1,820	0.00	1,820	182	0.00	—	6,366
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9,367	9,367
Stationary	1.62	1.48	4.13	3.77	0.01	0.22	0.00	0.22	0.22	0.00	0.22	0.00	756	756	0.03	0.01	0.00	758
Total	144	138	154	516	2.10	3.68	121	125	3.47	31.2	34.7	3,210	240,880	244,090	329	25.5	9,887	269,822
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	32.5	29.3	158	281	2.01	3.20	121	124	3.05	31.2	34.3	—	208,742	208,742	2.76	22.0	13.5	215,386
Area	79.9	79.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	18,942	18,942	1.81	0.22	—	19,052
Water	—	—	—	—	—	—	—	—	—	—	—	1,390	3,964	5,354	143	3.43	—	9,951
Waste	—	—	—	—	—	—	—	—	—	—	—	1,820	0.00	1,820	182	0.00	—	6,366
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9,367	9,367
Stationary	1.62	1.48	4.13	3.77	0.01	0.22	0.00	0.22	0.22	0.00	0.22	0.00	756	756	0.03	0.01	0.00	758
Total	114	111	162	285	2.02	3.42	121	124	3.27	31.2	34.5	3,210	232,403	235,613	329	25.7	9,380	260,880
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	23.9	21.5	117	221	1.48	2.34	87.8	90.2	2.23	22.7	24.9	—	153,928	153,928	2.04	16.1	164	158,953
Area	93.2	92.1	0.63	74.7	< 0.005	0.13	—	0.13	0.10	—	0.10	—	307	307	0.01	< 0.005	—	308
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	18,942	18,942	1.81	0.22	—	19,052
Water	—	—	—	—	—	—	—	—	—	—	—	1,390	3,964	5,354	143	3.43	—	9,951
Waste	—	—	—	—	—	—	—	—	—	—	—	1,820	0.00	1,820	182	0.00	—	6,366
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9,367	9,367
Stationary	0.22	0.20	0.57	0.52	< 0.005	0.03	0.00	0.03	0.03	0.00	0.03	0.00	104	104	< 0.005	< 0.005	0.00	104
Total	117	114	118	297	1.49	2.50	87.8	90.3	2.36	22.7	25.0	3,210	177,244	180,455	329	19.8	9,531	204,101
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	4.37	3.93	21.3	40.4	0.27	0.43	16.0	16.5	0.41	4.14	4.54	—	25,485	25,485	0.34	2.67	27.2	26,316
Area	17.0	16.8	0.11	13.6	< 0.005	0.02	—	0.02	0.02	—	0.02	—	50.8	50.8	< 0.005	< 0.005	—	51.0
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	3,136	3,136	0.30	0.04	—	3,154
Water	—	—	—	—	—	—	—	—	—	—	—	230	656	886	23.7	0.57	—	1,648
Waste	—	—	—	—	—	—	—	—	—	—	—	301	0.00	301	30.1	0.00	—	1,054
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,551	1,551
Stationary	0.04	0.04	0.10	0.09	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	17.1	17.1	< 0.005	< 0.005	0.00	17.2
Total	21.4	20.8	21.5	54.1	0.27	0.46	16.0	16.5	0.43	4.14	4.57	531	29,345	29,876	54.4	3.28	1,578	33,791

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	7.12	6.53	3.45	74.8	0.17	0.06	16.6	16.7	0.06	4.19	4.25	—	16,844	16,844	0.54	0.37	40.1	17,008
User Defined Industrial	4.26	3.56	134	37.6	1.37	2.93	49.0	51.9	2.81	13.1	15.9	—	143,691	143,691	0.34	20.3	347	150,087
Refrigerated Warehouse-No Rail	2.12	1.94	1.03	22.2	0.05	0.02	4.95	4.96	0.02	1.25	1.26	—	5,007	5,007	0.16	0.11	11.9	5,056
Unrefrigerated Warehouse-No Rail	21.6	19.8	10.5	227	0.50	0.19	50.4	50.6	0.17	12.7	12.9	—	51,054	51,054	1.64	1.13	122	51,552
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	35.1	31.8	149	361	2.09	3.20	121	124	3.05	31.2	34.3	—	216,596	216,596	2.68	21.9	521	223,703
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	6.57	5.98	3.83	56.3	0.15	0.06	16.6	16.7	0.06	4.19	4.25	—	15,017	15,017	0.56	0.40	1.04	15,150
User Defined Industrial	4.07	3.40	141	37.8	1.37	2.93	49.0	51.9	2.81	13.1	15.9	—	143,747	143,747	0.33	20.3	9.01	149,811
Refrigerated Warehouse-No Rail	1.95	1.78	1.14	16.7	0.04	0.02	4.95	4.96	0.02	1.25	1.26	—	4,464	4,464	0.17	0.12	0.31	4,504
Unrefrigerated Warehouse-No Rail	19.9	18.1	11.6	171	0.45	0.19	50.4	50.6	0.17	12.7	12.9	—	45,515	45,515	1.70	1.21	3.15	45,921
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	32.5	29.3	158	281	2.01	3.20	121	124	3.05	31.2	34.3	—	208,742	208,742	2.76	22.0	13.5	215,386
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.88	0.80	0.53	8.18	0.02	0.01	2.20	2.21	0.01	0.55	0.56	—	1,868	1,868	0.07	0.05	2.10	1,887
User Defined Industrial	0.55	0.46	19.0	5.00	0.18	0.39	6.50	6.89	0.37	1.74	2.11	—	17,398	17,398	0.04	2.46	18.1	18,149
Refrigerated Warehouse-No Rail	0.26	0.24	0.16	2.43	0.01	< 0.005	0.65	0.66	< 0.005	0.16	0.17	—	555	555	0.02	0.01	0.62	561

Unrefrigerated Warehouse-No Rail	2.67	2.43	1.62	24.8	0.06	0.02	6.67	6.70	0.02	1.68	1.70	—	5,663	5,663	0.21	0.15	6.35	5,719
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	4.37	3.93	21.3	40.4	0.27	0.43	16.0	16.5	0.41	4.14	4.54	—	25,485	25,485	0.34	2.67	27.2	26,316

4.1.2. 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	7.12	6.53	3.45	74.8	0.17	0.06	16.6	16.7	0.06	4.19	4.25	—	16,844	16,844	0.54	0.37	40.1	17,008
User Defined Industrial	4.26	3.56	134	37.6	1.37	2.93	49.0	51.9	2.81	13.1	15.9	—	143,691	143,691	0.34	20.3	347	150,087
Refrigerated Warehouse-No Rail	2.12	1.94	1.03	22.2	0.05	0.02	4.95	4.96	0.02	1.25	1.26	—	5,007	5,007	0.16	0.11	11.9	5,056
Unrefrigerated Warehouse-No Rail	21.6	19.8	10.5	227	0.50	0.19	50.4	50.6	0.17	12.7	12.9	—	51,054	51,054	1.64	1.13	122	51,552
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	35.1	31.8	149	361	2.09	3.20	121	124	3.05	31.2	34.3	—	216,596	216,596	2.68	21.9	521	223,703
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	6.57	5.98	3.83	56.3	0.15	0.06	16.6	16.7	0.06	4.19	4.25	—	15,017	15,017	0.56	0.40	1.04	15,150
User Defined Industrial	4.07	3.40	141	37.8	1.37	2.93	49.0	51.9	2.81	13.1	15.9	—	143,747	143,747	0.33	20.3	9.01	149,811
Refrigerated Warehouse-No Rail	1.95	1.78	1.14	16.7	0.04	0.02	4.95	4.96	0.02	1.25	1.26	—	4,464	4,464	0.17	0.12	0.31	4,504
Unrefrigerated Warehouse-No Rail	19.9	18.1	11.6	171	0.45	0.19	50.4	50.6	0.17	12.7	12.9	—	45,515	45,515	1.70	1.21	3.15	45,921
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	32.5	29.3	158	281	2.01	3.20	121	124	3.05	31.2	34.3	—	208,742	208,742	2.76	22.0	13.5	215,386
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.88	0.80	0.53	8.18	0.02	0.01	2.20	2.21	0.01	0.55	0.56	—	1,868	1,868	0.07	0.05	2.10	1,887
User Defined Industrial	0.55	0.46	19.0	5.00	0.18	0.39	6.50	6.89	0.37	1.74	2.11	—	17,398	17,398	0.04	2.46	18.1	18,149

Refrigerated	0.26	0.24	0.16	2.43	0.01	< 0.005	0.65	0.66	< 0.005	0.16	0.17	—	555	555	0.02	0.01	0.62	561
Unrefrigerated Warehouse-No Rail	2.67	2.43	1.62	24.8	0.06	0.02	6.67	6.70	0.02	1.68	1.70	—	5,663	5,663	0.21	0.15	6.35	5,719
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	4.37	3.93	21.3	40.4	0.27	0.43	16.0	16.5	0.41	4.14	4.54	—	25,485	25,485	0.34	2.67	27.2	26,316

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	3,948	3,948	0.38	0.05	—	3,971
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	7,229	7,229	0.69	0.08	—	7,271

Unrefrigerated Wareho Rail	—	—	—	—	—	—	—	—	—	—	—	—	12,199	12,199	1.16	0.14	—	12,270
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	1,147	1,147	0.11	0.01	—	1,153
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	24,521	24,521	2.34	0.28	—	24,664
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	3,948	3,948	0.38	0.05	—	3,971
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	7,229	7,229	0.69	0.08	—	7,271
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	12,199	12,199	1.16	0.14	—	12,270
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	1,147	1,147	0.11	0.01	—	1,153
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	24,521	24,521	2.34	0.28	—	24,664
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	654	654	0.06	0.01	—	657
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	1,197	1,197	0.11	0.01	—	1,204
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	2,020	2,020	0.19	0.02	—	2,031
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	190	190	0.02	< 0.005	—	191
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	4,060	4,060	0.39	0.05	—	4,083

4.2.2. Electricity Emissions By Land Use - 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	3,541	3,541	0.34	0.04	—	3,561
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Refriger Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	3,276	3,276	0.31	0.04	—	3,295
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	10,979	10,979	1.05	0.13	—	11,043
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	1,147	1,147	0.11	0.01	—	1,153
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	18,942	18,942	1.81	0.22	—	19,052
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	3,541	3,541	0.34	0.04	—	3,561
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	3,276	3,276	0.31	0.04	—	3,295
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	10,979	10,979	1.05	0.13	—	11,043
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	1,147	1,147	0.11	0.01	—	1,153
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Total	—	—	—	—	—	—	—	—	—	—	—	—	18,942	18,942	1.81	0.22	—	19,052
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	586	586	0.06	0.01	—	590
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	542	542	0.05	0.01	—	545
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	1,818	1,818	0.17	0.02	—	1,828
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	190	190	0.02	< 0.005	—	191
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	3,136	3,136	0.30	0.04	—	3,154

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

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
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
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
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
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
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
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

Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
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
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
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
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.2.4. Natural Gas Emissions By Land Use - 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
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
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
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
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
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

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
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
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
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
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
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
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.3. Area Emissions by Source

4.3.1. Unmitigated

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

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	75.0	75.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	4.90	4.90	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	26.9	24.9	1.27	151	0.01	0.27	—	0.27	0.20	—	0.20	—	623	623	0.03	0.01	—	625
Total	107	105	1.27	151	0.01	0.27	—	0.27	0.20	—	0.20	—	623	623	0.03	0.01	—	625
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	75.0	75.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	4.90	4.90	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	79.9	79.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	13.7	13.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.89	0.89	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	2.43	2.24	0.11	13.6	< 0.005	0.02	—	0.02	0.02	—	0.02	—	50.8	50.8	< 0.005	< 0.005	—	51.0
Total	17.0	16.8	0.11	13.6	< 0.005	0.02	—	0.02	0.02	—	0.02	—	50.8	50.8	< 0.005	< 0.005	—	51.0

4.3.2. Mitigated

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	75.0	75.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	4.90	4.90	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	26.9	24.9	1.27	151	0.01	0.27	—	0.27	0.20	—	0.20	—	623	623	0.03	0.01	—	625
Total	107	105	1.27	151	0.01	0.27	—	0.27	0.20	—	0.20	—	623	623	0.03	0.01	—	625

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	75.0	75.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	4.90	4.90	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	79.9	79.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	13.7	13.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.89	0.89	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	2.43	2.24	0.11	13.6	< 0.005	0.02	—	0.02	0.02	—	0.02	—	50.8	50.8	< 0.005	< 0.005	—	51.0
Total	17.0	16.8	0.11	13.6	< 0.005	0.02	—	0.02	0.02	—	0.02	—	50.8	50.8	< 0.005	< 0.005	—	51.0

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

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

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

General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	154	440	594	15.9	0.38	—	1,104
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	154	440	594	15.9	0.38	—	1,104
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	1,234	3,519	4,753	127	3.05	—	8,832
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1,542	4,398	5,941	159	3.81	—	11,040
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	154	440	594	15.9	0.38	—	1,104
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	154	440	594	15.9	0.38	—	1,104

Unrefrigerated Wareho Rail	—	—	—	—	—	—	—	—	—	—	—	1,234	3,519	4,753	127	3.05	—	8,832
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1,542	4,398	5,941	159	3.81	—	11,040
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	25.5	72.8	98.3	2.63	0.06	—	183
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	25.5	72.8	98.3	2.63	0.06	—	183
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	204	583	787	21.0	0.50	—	1,462
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	255	728	984	26.3	0.63	—	1,828

4.4.2. 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	139	396	535	14.3	0.34	—	995
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	139	396	535	14.3	0.34	—	995
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	1,112	3,171	4,284	114	2.75	—	7,961
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1,390	3,964	5,354	143	3.43	—	9,951
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	139	396	535	14.3	0.34	—	995
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Refrigerated Wareho Rail	—	—	—	—	—	—	—	—	—	—	—	139	396	535	14.3	0.34	—	995
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	1,112	3,171	4,284	114	2.75	—	7,961
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1,390	3,964	5,354	143	3.43	—	9,951
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	23.0	65.6	88.6	2.37	0.06	—	165
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	23.0	65.6	88.6	2.37	0.06	—	165
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	184	525	709	18.9	0.45	—	1,318
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	230	656	886	23.7	0.57	—	1,648

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	233	0.00	233	23.2	0.00	—	814
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	176	0.00	176	17.6	0.00	—	617
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	1,411	0.00	1,411	141	0.00	—	4,935
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1,820	0.00	1,820	182	0.00	—	6,366
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	233	0.00	233	23.2	0.00	—	814
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	176	0.00	176	17.6	0.00	—	617
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	1,411	0.00	1,411	141	0.00	—	4,935
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1,820	0.00	1,820	182	0.00	—	6,366
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	38.5	0.00	38.5	3.85	0.00	—	135
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	29.2	0.00	29.2	2.92	0.00	—	102

Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	234	0.00	234	23.3	0.00	—	817
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	301	0.00	301	30.1	0.00	—	1,054

4.5.2. 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	233	0.00	233	23.2	0.00	—	814
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	176	0.00	176	17.6	0.00	—	617
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	1,411	0.00	1,411	141	0.00	—	4,935
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1,820	0.00	1,820	182	0.00	—	6,366
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	233	0.00	233	23.2	0.00	—	814
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	176	0.00	176	17.6	0.00	—	617
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	1,411	0.00	1,411	141	0.00	—	4,935
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1,820	0.00	1,820	182	0.00	—	6,366
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	38.5	0.00	38.5	3.85	0.00	—	135
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Refrigerated	—	—	—	—	—	—	—	—	—	—	—	29.2	0.00	29.2	2.92	0.00	—	102
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	234	0.00	234	23.3	0.00	—	817
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	301	0.00	301	30.1	0.00	—	1,054

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	90.6	90.6
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9,276	9,276
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9,367	9,367
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	90.6	90.6
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9,276	9,276
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9,367	9,367
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15.0	15.0
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,536	1,536
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,551	1,551

4.6.2. 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	90.6	90.6
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9,276	9,276
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9,367	9,367

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	90.6	90.6
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9,276	9,276
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9,367	9,367
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15.0	15.0
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,536	1,536
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,551	1,551

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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7.2. Mitigated

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Emerge Generator	1.62	1.48	4.13	3.77	0.01	0.22	0.00	0.22	0.22	0.00	0.22	0.00	756	756	0.03	0.01	0.00	758
Total	1.62	1.48	4.13	3.77	0.01	0.22	0.00	0.22	0.22	0.00	0.22	0.00	756	756	0.03	0.01	0.00	758
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	1.62	1.48	4.13	3.77	0.01	0.22	0.00	0.22	0.22	0.00	0.22	0.00	756	756	0.03	0.01	0.00	758
Total	1.62	1.48	4.13	3.77	0.01	0.22	0.00	0.22	0.22	0.00	0.22	0.00	756	756	0.03	0.01	0.00	758
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.04	0.04	0.10	0.09	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	17.1	17.1	< 0.005	< 0.005	0.00	17.2
Total	0.04	0.04	0.10	0.09	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	17.1	17.1	< 0.005	< 0.005	0.00	17.2

4.8.2. Mitigated

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

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	1.62	1.48	4.13	3.77	0.01	0.22	0.00	0.22	0.22	0.00	0.22	0.00	756	756	0.03	0.01	0.00	758
Total	1.62	1.48	4.13	3.77	0.01	0.22	0.00	0.22	0.22	0.00	0.22	0.00	756	756	0.03	0.01	0.00	758
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Emergency	1.62	1.48	4.13	3.77	0.01	0.22	0.00	0.22	0.22	0.00	0.22	0.00	756	756	0.03	0.01	0.00	758
Total	1.62	1.48	4.13	3.77	0.01	0.22	0.00	0.22	0.22	0.00	0.22	0.00	756	756	0.03	0.01	0.00	758
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.04	0.04	0.10	0.09	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	17.1	17.1	< 0.005	< 0.005	0.00	17.2
Total	0.04	0.04	0.10	0.09	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	17.1	17.1	< 0.005	< 0.005	0.00	17.2

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

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

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

4.9.2. Mitigated

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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year

General Heavy Industry	1,608	136	54.4	429,158	24,008	2,031	812	6,407,471
User Defined Industrial	90.0	7.62	3.06	24,025	3,600	305	123	960,984
Refrigerated Warehouse-No Rail	478	40.4	16.2	127,577	7,137	604	242	1,904,769
User Defined Industrial	264	22.3	8.95	70,464	10,561	894	358	2,818,556
Unrefrigerated Warehouse-No Rail	4,874	412	165	1,300,785	72,768	6,157	2,461	19,421,177
User Defined Industrial	1,056	89.4	35.6	281,812	42,237	3,575	1,426	11,272,466
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
General Heavy Industry	1,608	136	54.4	429,158	24,008	2,031	812	6,407,471
User Defined Industrial	90.0	7.62	3.06	24,025	3,600	305	123	960,984
Refrigerated Warehouse-No Rail	478	40.4	16.2	127,577	7,137	604	242	1,904,769
User Defined Industrial	264	22.3	8.95	70,464	10,561	894	358	2,818,556
Unrefrigerated Warehouse-No Rail	4,874	412	165	1,300,785	72,768	6,157	2,461	19,421,177
User Defined Industrial	1,056	89.4	35.6	281,812	42,237	3,575	1,426	11,272,466
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.1.2. Mitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	5,221,104	1,740,368	377,465

5.10.3. Landscape Equipment

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

5.10.4. Landscape Equipment - Mitigated

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 Heavy Industry	4,161,943	346	0.0330	0.0040	0.00

User Defined Industrial	0.00	346	0.0330	0.0040	0.00
Refrigerated Warehouse-No Rail	7,621,233	346	0.0330	0.0040	0.00
User Defined Industrial	0.00	346	0.0330	0.0040	0.00
Unrefrigerated Warehouse-No Rail	12,861,185	346	0.0330	0.0040	0.00
User Defined Industrial	0.00	346	0.0330	0.0040	0.00
Parking Lot	1,208,863	346	0.0330	0.0040	0.00
Other Asphalt Surfaces	0.00	346	0.0330	0.0040	0.00

5.11.2. Mitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
General Heavy Industry	3,732,975	346	0.0330	0.0040	0.00
User Defined Industrial	0.00	346	0.0330	0.0040	0.00
Refrigerated Warehouse-No Rail	3,453,489	346	0.0330	0.0040	0.00
User Defined Industrial	0.00	346	0.0330	0.0040	0.00
Unrefrigerated Warehouse-No Rail	11,575,067	346	0.0330	0.0040	0.00
User Defined Industrial	0.00	346	0.0330	0.0040	0.00
Parking Lot	1,208,863	346	0.0330	0.0040	0.00
Other Asphalt Surfaces	0.00	346	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
General Heavy Industry	80,492,113	0.00

User Defined Industrial	0.00	0.00
Refrigerated Warehouse-No Rail	80,492,113	0.00
User Defined Industrial	0.00	0.00
Unrefrigerated Warehouse-No Rail	643,935,975	552,711
User Defined Industrial	0.00	0.00
Parking Lot	0.00	0.00
Other Asphalt Surfaces	0.00	0.00

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
General Heavy Industry	72,563,639	0.00
User Defined Industrial	0.00	0.00
Refrigerated Warehouse-No Rail	72,563,639	0.00
User Defined Industrial	0.00	0.00
Unrefrigerated Warehouse-No Rail	580,508,281	231,040
User Defined Industrial	0.00	0.00
Parking Lot	0.00	0.00
Other Asphalt Surfaces	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
General Heavy Industry	432	—
User Defined Industrial	0.00	—
Refrigerated Warehouse-No Rail	327	—
User Defined Industrial	0.00	—
Unrefrigerated Warehouse-No Rail	2,618	—

User Defined Industrial	0.00	—
Parking Lot	0.00	—
Other Asphalt Surfaces	0.00	—

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
General Heavy Industry	432	—
User Defined Industrial	0.00	—
Refrigerated Warehouse-No Rail	327	—
User Defined Industrial	0.00	—
Unrefrigerated Warehouse-No Rail	2,618	—
User Defined Industrial	0.00	—
Parking Lot	0.00	—
Other Asphalt Surfaces	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
General Heavy Industry	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0
Refrigerated Warehouse-No Rail	Cold storage	R-404A	3,922	7.50	7.50	7.50	25.0

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
General Heavy Industry	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0

Refrigerated Warehouse-No Rail	Cold storage	R-404A	3,922	7.50	7.50	7.50	25.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.15.2. Mitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
Emergency Generator	Diesel	1.00	1.00	50.0	300	0.73
Emergency Generator	Diesel	1.00	1.00	50.0	300	0.73
Emergency Generator	Diesel	1.00	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

5.18.1.2. 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	34.9	annual days of extreme heat
Extreme Precipitation	1.05	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.99	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	80.0
AQ-PM	7.52

AQ-DPM	21.9
Drinking Water	34.9
Lead Risk Housing	27.7
Pesticides	0.00
Toxic Releases	37.1
Traffic	59.7
Effect Indicators	—
CleanUp Sites	52.1
Groundwater	44.8
Haz Waste Facilities/Generators	16.6
Impaired Water Bodies	51.2
Solid Waste	84.7
Sensitive Population	—
Asthma	88.0
Cardio-vascular	89.5
Low Birth Weights	91.9
Socioeconomic Factor Indicators	—
Education	26.9
Housing	11.6
Linguistic	—
Poverty	52.5
Unemployment	90.6

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	44.97626075

Employed	30.46323624
Median HI	35.0442705
Education	—
Bachelor's or higher	42.93596818
High school enrollment	100
Preschool enrollment	39.79212113
Transportation	—
Auto Access	85.40998332
Active commuting	24.00872578
Social	—
2-parent households	51.18696266
Voting	75.34967278
Neighborhood	—
Alcohol availability	88.37418196
Park access	16.65597331
Retail density	8.469138971
Supermarket access	2.399589375
Tree canopy	0.71859361
Housing	—
Homeownership	62.60746824
Housing habitability	64.39112024
Low-inc homeowner severe housing cost burden	17.8108559
Low-inc renter severe housing cost burden	77.19748492
Uncrowded housing	68.66418581
Health Outcomes	—
Insured adults	64.22430386
Arthritis	4.4
Asthma ER Admissions	7.6

High Blood Pressure	8.9
Cancer (excluding skin)	9.1
Asthma	30.0
Coronary Heart Disease	6.8
Chronic Obstructive Pulmonary Disease	13.3
Diagnosed Diabetes	35.6
Life Expectancy at Birth	34.2
Cognitively Disabled	41.3
Physically Disabled	11.3
Heart Attack ER Admissions	2.7
Mental Health Not Good	48.5
Chronic Kidney Disease	20.1
Obesity	46.5
Pedestrian Injuries	48.3
Physical Health Not Good	39.9
Stroke	15.1
Health Risk Behaviors	—
Binge Drinking	57.0
Current Smoker	46.7
No Leisure Time for Physical Activity	58.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	58.1
Elderly	16.8
English Speaking	81.5
Foreign-born	11.0
Outdoor Workers	47.0

Climate Change Adaptive Capacity	—
Impervious Surface Cover	90.2
Traffic Density	37.9
Traffic Access	23.0
Other Indices	—
Hardship	32.7
Other Decision Support	—
2016 Voting	75.3

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	65.0
Healthy Places Index Score for Project Location (b)	46.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification

Land Use	Total Project area is 224.90 acres
Construction: Construction Phases	Construction schedule adjusted based on the 2029 Opening Year
Construction: Off-Road Equipment	Construction equipment adjusted based on changes made to the schedule
Construction: Trips and VMT	Vendor Trips adjusted based on CalEEMod defaults for Building Construction and number of days for Site Preparation, Grading, and Building Construction
Operations: Vehicle Data	Trip characteristics based on information provided in the Traffic analysis
Operations: Fleet Mix	Passenger Car Mix estimated based on the CalEEMod default fleet mix and the ratio of the vehicle classes (LDA, LDT1, LDT2, MDV, & MCY). Truck Mix based on information in the Traffic analysis
Operations: Energy Use	No natural gas for building envelope. Electricity usage for the General Heavy Industry land use was adjusted to account for electricity usage from on-site cargo handling equipment

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APPENDIX 4.3:

EMFAC2021 MODEL OUTPUTS

Source: EMFAC2021 (v1.0.2) Emissions Inventory
Region Type: Sub-Area
Region: San Bernardino (MD)
Calendar Year: 2025
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 Categc	Model Year	Speed	Fuel	Population	Total VMT	Fuel_Consumption	Fuel_Consumption	Total Fuel	VMT	Total VMT	Miles per Gallon	Vehicle Class
San Bernardino (MD)	2025 HHDT	Aggregate	Aggregate	Gasoline	2.232242923	174.685266	0.044229524	44.229524	432481.2549	174.685266	2734029.591	6.32	HHDT
San Bernardino (MD)	2025 HHDT	Aggregate	Aggregate	Diesel	13290.67817	2718528.943	432.0213964	432021.3964		2718528.943			
San Bernardino (MD)	2025 HHDT	Aggregate	Aggregate	Electricity	73.24127598	12813.71434	0	0		12813.71434			
San Bernardino (MD)	2025 HHDT	Aggregate	Aggregate	Natural Gas	35.79343022	2512.247509	0.415629021	415.629021		2512.247509			
San Bernardino (MD)	2025 LDA	Aggregate	Aggregate	Gasoline	307204.9065	12797926.77	429.1779078	429177.9078	436597.3127	12797926.77	14073139.3	32.23	LDA
San Bernardino (MD)	2025 LDA	Aggregate	Aggregate	Diesel	962.0467026	31196.26149	0.748307293	748.307293		31196.26149			
San Bernardino (MD)	2025 LDA	Aggregate	Aggregate	Electricity	15945.46151	804402.9682	0	0		804402.9682			
San Bernardino (MD)	2025 LDA	Aggregate	Aggregate	Plug-in Hybric	8911.299519	439613.293	6.671097623	6671.097623		439613.293			
San Bernardino (MD)	2025 LDT1	Aggregate	Aggregate	Gasoline	30281.94807	1023948.458	41.65322818	41653.22818	41697.61719	1023948.458	1029868.3	24.70	LDT1
San Bernardino (MD)	2025 LDT1	Aggregate	Aggregate	Diesel	14.37328038	188.8766986	0.008040521	8.040521		188.8766986			
San Bernardino (MD)	2025 LDT1	Aggregate	Aggregate	Electricity	63.4184097	3080.600848	0	0		3080.600848			
San Bernardino (MD)	2025 LDT1	Aggregate	Aggregate	Plug-in Hybric	49.86017175	2650.364423	0.03634849	36.34849		2650.364423			
San Bernardino (MD)	2025 LDT2	Aggregate	Aggregate	Gasoline	140054.4178	5773502.786	236.1756642	236175.6642	237720.0276	5773502.786	5897880.02	24.81	LDT2
San Bernardino (MD)	2025 LDT2	Aggregate	Aggregate	Diesel	454.8922035	20007.67935	0.611012146	611.012146		20007.67935			
San Bernardino (MD)	2025 LDT2	Aggregate	Aggregate	Electricity	1069.89935	39638.13947	0	0		39638.13947			
San Bernardino (MD)	2025 LDT2	Aggregate	Aggregate	Plug-in Hybric	1272.587663	64731.41535	0.933351272	933.351272		64731.41535			
San Bernardino (MD)	2025 LHDT1	Aggregate	Aggregate	Gasoline	12749.90304	475043.245	35.43436776	35434.36776	55010.64497	475043.245	883072.4904	16.05	LHDT1
San Bernardino (MD)	2025 LHDT1	Aggregate	Aggregate	Diesel	10857.0041	400920.8214	19.57627721	19576.27721		400920.8214			
San Bernardino (MD)	2025 LHDT1	Aggregate	Aggregate	Electricity	98.95601889	7108.423969	0	0		7108.423969			
San Bernardino (MD)	2025 LHDT2	Aggregate	Aggregate	Gasoline	1694.603438	62030.68257	5.192318957	5192.318957	15650.11671	62030.68257	242225.873	15.48	LHDT2
San Bernardino (MD)	2025 LHDT2	Aggregate	Aggregate	Diesel	4701.002143	178465.3217	10.45779775	10457.79775		178465.3217			
San Bernardino (MD)	2025 LHDT2	Aggregate	Aggregate	Electricity	25.33497762	1729.868729	0	0		1729.868729			
San Bernardino (MD)	2025 MCY	Aggregate	Aggregate	Gasoline	18028.35168	103626.8773	2.523996755	2523.996755	2523.996755	103626.8773	103626.8773	41.06	MCY
San Bernardino (MD)	2025 MDV	Aggregate	Aggregate	Gasoline	104110.8234	4088311.316	208.9513311	208951.3311	212434.2616	4088311.316	4239424.171	19.96	MDV
San Bernardino (MD)	2025 MDV	Aggregate	Aggregate	Diesel	1692.198431	67609.45588	2.88135729	2881.35729		67609.45588			
San Bernardino (MD)	2025 MDV	Aggregate	Aggregate	Electricity	1171.653338	43345.03939	0	0		43345.03939			
San Bernardino (MD)	2025 MDV	Aggregate	Aggregate	Plug-in Hybric	833.9511312	40158.35884	0.601573161	601.573161		40158.35884			
San Bernardino (MD)	2025 MH	Aggregate	Aggregate	Gasoline	2893.636898	25016.37485	5.245754427	5245.754427	6272.807843	25016.37485	35768.39412	5.70	MH
San Bernardino (MD)	2025 MH	Aggregate	Aggregate	Diesel	1253.718461	10752.01927	1.027053416	1027.053416		10752.01927			
San Bernardino (MD)	2025 MHDT	Aggregate	Aggregate	Gasoline	882.0237715	63858.83118	12.28009321	12280.09321	29977.28732	63858.83118	228066.8499	7.61	MHDT
San Bernardino (MD)	2025 MHDT	Aggregate	Aggregate	Diesel	2781.840623	161536.5192	17.65065663	17650.65663		161536.5192			
San Bernardino (MD)	2025 MHDT	Aggregate	Aggregate	Electricity	28.71678871	2254.085381	0	0		2254.085381			
San Bernardino (MD)	2025 MHDT	Aggregate	Aggregate	Natural Gas	9.099353532	417.4140741	0.046537478	46.537478		417.4140741			
San Bernardino (MD)	2025 OBUS	Aggregate	Aggregate	Gasoline	261.4887956	15607.15432	3.068703649	3068.703649	3748.986926	15607.15432	20801.72684	5.55	OBUS
San Bernardino (MD)	2025 OBUS	Aggregate	Aggregate	Diesel	75.38246548	5026.471411	0.680283277	680.283277		5026.471411			
San Bernardino (MD)	2025 OBUS	Aggregate	Aggregate	Electricity	1.341531249	168.1011082	0	0		168.1011082			
San Bernardino (MD)	2025 SBUS	Aggregate	Aggregate	Gasoline	98.49583354	6296.430474	0.679357612	679.357612	2603.492993	6296.430474	21027.36671	8.08	SBUS
San Bernardino (MD)	2025 SBUS	Aggregate	Aggregate	Diesel	629.7408474	14618.33063	1.924135381	1924.135381		14618.33063			
San Bernardino (MD)	2025 SBUS	Aggregate	Aggregate	Electricity	3.193149087	112.6056107	0	0		112.6056107			
San Bernardino (MD)	2025 UBUS	Aggregate	Aggregate	Gasoline	55.28517502	5275.618753	1.393158939	1393.158939	4688.363233	5275.618753	19298.70462	4.12	UBUS
San Bernardino (MD)	2025 UBUS	Aggregate	Aggregate	Diesel	2.531039845	250.3343972	0.03157511	31.57511		250.3343972			
San Bernardino (MD)	2025 UBUS	Aggregate	Aggregate	Electricity	0.196662013	20.74124617	0	0		20.74124617			
San Bernardino (MD)	2025 UBUS	Aggregate	Aggregate	Natural Gas	104.1147381	13752.01023	3.263629184	3263.629184		13752.01023			

Source: EMFAC2021 (v1.0.2) Emissions Inventory
Region Type: Sub-Area
Region: San Bernardino (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 Y	hicle Categ	Model Year	Speed	Fuel	Population	Total VMT	Fuel_Consumption	Fuel_Consumption	Total Fuel	VMT	Total VMT	Miles per Gallon	Vehicle Class
San Bernardino (MD)	2026	HHDT	Aggregate	Aggregate	Gasoline	1.899683726	174.3616545	0.04264416	42.64416028	432943.5148	174.3616545	2796460.733	6.46	HHDT
San Bernardino (MD)	2026	HHDT	Aggregate	Aggregate	Diesel	13602.29678	2771005.673	432.4799113	432479.9113		2771005.673			
San Bernardino (MD)	2026	HHDT	Aggregate	Aggregate	Electricity	127.8696544	22710.61538	0	0		22710.61538			
San Bernardino (MD)	2026	HHDT	Aggregate	Aggregate	Natural Gas	37.04411336	2570.082115	0.420959404	420.9594044		2570.082115			
San Bernardino (MD)	2026	LDA	Aggregate	Aggregate	Gasoline	305489.5206	12749590.6	418.9786743	418978.6743	426567.5923	12749590.6	14135869.68	33.14	LDA
San Bernardino (MD)	2026	LDA	Aggregate	Aggregate	Diesel	876.928382	28379.27708	0.672827136	672.8271359		28379.27708			
San Bernardino (MD)	2026	LDA	Aggregate	Aggregate	Electricity	17937.07805	893570.6016	0	0		893570.6016			
San Bernardino (MD)	2026	LDA	Aggregate	Aggregate	Plug-in Hybric	9527.688784	464329.1939	6.916090829	6916.090829		464329.1939			
San Bernardino (MD)	2026	LDT1	Aggregate	Aggregate	Gasoline	29409.2209	1000607.571	39.96456636	39964.56636	40018.19281	1000607.571	1008273.494	25.20	LDT1
San Bernardino (MD)	2026	LDT1	Aggregate	Aggregate	Diesel	12.10299031	155.9958444	0.006621349	6.621348638		155.9958444			
San Bernardino (MD)	2026	LDT1	Aggregate	Aggregate	Electricity	81.37647626	4027.245512	0	0		4027.245512			
San Bernardino (MD)	2026	LDT1	Aggregate	Aggregate	Plug-in Hybric	66.2932027	3482.681855	0.047005099	47.00509905		3482.681855			
San Bernardino (MD)	2026	LDT2	Aggregate	Aggregate	Gasoline	142488.6507	5890341.748	235.1564544	235156.4544	236829.03	5890341.748	6034570.502	25.48	LDT2
San Bernardino (MD)	2026	LDT2	Aggregate	Aggregate	Diesel	473.8572412	20738.00724	0.620690062	620.6900618		20738.00724			
San Bernardino (MD)	2026	LDT2	Aggregate	Aggregate	Electricity	1345.306205	49286.61888	0	0		49286.61888			
San Bernardino (MD)	2026	LDT2	Aggregate	Aggregate	Plug-in Hybric	1480.744283	74204.12838	1.051885518	1051.885518		74204.12838			
San Bernardino (MD)	2026	LHDT1	Aggregate	Aggregate	Gasoline	12487.32989	470160.4045	34.21673632	34216.73632	53301.96324	470160.4045	875352.836	16.42	LHDT1
San Bernardino (MD)	2026	LHDT1	Aggregate	Aggregate	Diesel	10626.46114	392131.3081	19.08522692	19085.22692		392131.3081			
San Bernardino (MD)	2026	LHDT1	Aggregate	Aggregate	Electricity	189.3434838	13061.12332	0	0		13061.12332			
San Bernardino (MD)	2026	LHDT2	Aggregate	Aggregate	Gasoline	1661.454966	61116.2607	5.010679571	5010.679571	15258.7239	61116.2607	240080.2672	15.73	LHDT2
San Bernardino (MD)	2026	LHDT2	Aggregate	Aggregate	Diesel	4658.884027	175787.53	10.24804433	10248.04433		175787.53			
San Bernardino (MD)	2026	LHDT2	Aggregate	Aggregate	Electricity	48.36806308	3176.476456	0	0		3176.476456			
San Bernardino (MD)	2026	MCY	Aggregate	Aggregate	Gasoline	17895.1562	102596.0564	2.488161137	2488.161137	2488.161137	102596.0564	102596.0564	41.23	MCY
San Bernardino (MD)	2026	MDV	Aggregate	Aggregate	Gasoline	103415.0479	4072512.867	203.5278514	203527.8514	206971.262	4072512.867	4238157.587	20.48	MDV
San Bernardino (MD)	2026	MDV	Aggregate	Aggregate	Diesel	1665.031155	65783.33298	2.764958659	2764.958659		65783.33298			
San Bernardino (MD)	2026	MDV	Aggregate	Aggregate	Electricity	1464.490328	53552.91746	0	0		53552.91746			
San Bernardino (MD)	2026	MDV	Aggregate	Aggregate	Plug-in Hybric	969.4210543	46308.47	0.678452004	678.4520035		46308.47			
San Bernardino (MD)	2026	MH	Aggregate	Aggregate	Gasoline	2707.798413	23494.3462	4.926517077	4926.517077	5930.430641	23494.3462	33999.10524	5.73	MH
San Bernardino (MD)	2026	MH	Aggregate	Aggregate	Diesel	1229.529392	10504.75905	1.003913564	1003.913564		10504.75905			
San Bernardino (MD)	2026	MHDT	Aggregate	Aggregate	Gasoline	866.6572583	63825.99852	12.12732851	12127.32851	29914.49002	63825.99852	231729.9812	7.75	MHDT
San Bernardino (MD)	2026	MHDT	Aggregate	Aggregate	Diesel	2842.733423	163441.0013	17.7380062	17738.0062		163441.0013			
San Bernardino (MD)	2026	MHDT	Aggregate	Aggregate	Electricity	52.39361043	4021.365345	0	0		4021.365345			
San Bernardino (MD)	2026	MHDT	Aggregate	Aggregate	Natural Gas	9.762820125	441.6160368	0.049155313	49.15531296		441.6160368			
San Bernardino (MD)	2026	OBUS	Aggregate	Aggregate	Gasoline	251.3212704	14921.97326	2.901576422	2901.576422	3581.716592	14921.97326	20261.84274	5.66	OBUS
San Bernardino (MD)	2026	OBUS	Aggregate	Aggregate	Diesel	78.36164299	5061.302238	0.68014017	680.1401701		5061.302238			
San Bernardino (MD)	2026	OBUS	Aggregate	Aggregate	Electricity	2.250369302	278.5672458	0	0		278.5672458			
San Bernardino (MD)	2026	SBUS	Aggregate	Aggregate	Gasoline	100.6931333	6500.469455	0.697198308	697.1983081	2610.051605	6500.469455	21263.28761	8.15	SBUS
San Bernardino (MD)	2026	SBUS	Aggregate	Aggregate	Diesel	633.2263747	14570.63628	1.912853297	1912.853297		14570.63628			
San Bernardino (MD)	2026	SBUS	Aggregate	Aggregate	Electricity	5.499587425	192.1818785	0	0		192.1818785			
San Bernardino (MD)	2026	UBUS	Aggregate	Aggregate	Gasoline	55.39653929	5286.245751	1.395975188	1395.975188	4595.49546	5286.245751	19337.57917	4.21	UBUS
San Bernardino (MD)	2026	UBUS	Aggregate	Aggregate	Diesel	2.365880584	238.0224353	0.030309796	30.3097962		238.0224353			
San Bernardino (MD)	2026	UBUS	Aggregate	Aggregate	Electricity	0.194695832	20.5946752	0	0		20.5946752			
San Bernardino (MD)	2026	UBUS	Aggregate	Aggregate	Natural Gas	104.4970827	13792.71631	3.169210476	3169.210476		13792.71631			

Source: EMFAC2021 (v1.0.2) Emissions Inventory
Region Type: Sub-Area
Region: San Bernardino (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 Vhicle Categc	Model Year	Speed	Fuel	Population	Total VMT	Fuel_Consumption	Fuel_Consumption	Total Fuel	VMT	Total VMT	Miles per Gallon	Vehicle Class
San Bernardino (MD)	2027 HHDT	Aggregate	Aggregate	Gasoline	1.648579799	174.2440566	0.041192773	41.19277277	432433.3143	174.2440566	2860308.613	6.61	HHDT
San Bernardino (MD)	2027 HHDT	Aggregate	Aggregate	Diesel	13884.76721	2820783.598	431.9614958	431961.4958		2820783.598			
San Bernardino (MD)	2027 HHDT	Aggregate	Aggregate	Electricity	203.611053	36692.37755	0	0		36692.37755			
San Bernardino (MD)	2027 HHDT	Aggregate	Aggregate	Natural Gas	38.43417877	2658.392904	0.430625717	430.6257172		2658.392904			
San Bernardino (MD)	2027 LDA	Aggregate	Aggregate	Gasoline	304027.2597	12731878.05	411.1416484	411141.6484	418868.1427	12731878.05	14222963.06	33.96	LDA
San Bernardino (MD)	2027 LDA	Aggregate	Aggregate	Diesel	791.9986965	25719.02477	0.603756671	603.7566709		25719.02477			
San Bernardino (MD)	2027 LDA	Aggregate	Aggregate	Electricity	19845.71259	978565.9728	0	0		978565.9728			
San Bernardino (MD)	2027 LDA	Aggregate	Aggregate	Plug-in Hybric	10089.08881	486800.0113	7.122737607	7122.737607		486800.0113			
San Bernardino (MD)	2027 LDT1	Aggregate	Aggregate	Gasoline	28604.64563	980711.821	38.53767219	38537.67219	38599.60265	980711.821	990384.3406	25.66	LDT1
San Bernardino (MD)	2027 LDT1	Aggregate	Aggregate	Diesel	5.007041186	67.97847461	0.002773222	2.773221572		67.97847461			
San Bernardino (MD)	2027 LDT1	Aggregate	Aggregate	Electricity	103.0738565	5167.769102	0	0		5167.769102			
San Bernardino (MD)	2027 LDT1	Aggregate	Aggregate	Plug-in Hybric	85.15205729	4436.772028	0.059157244	59.15724431		4436.772028			
San Bernardino (MD)	2027 LDT2	Aggregate	Aggregate	Gasoline	144969.3345	6012722.206	235.2207429	235220.7429	237025.8269	6012722.206	6177721.312	26.06	LDT2
San Bernardino (MD)	2027 LDT2	Aggregate	Aggregate	Diesel	490.9747542	21438.14839	0.631769614	631.7696139		21438.14839			
San Bernardino (MD)	2027 LDT2	Aggregate	Aggregate	Electricity	1643.240566	59550.62595	0	0		59550.62595			
San Bernardino (MD)	2027 LDT2	Aggregate	Aggregate	Plug-in Hybric	1696.063481	84010.33114	1.173314446	1173.314446		84010.33114			
San Bernardino (MD)	2027 LHDT1	Aggregate	Aggregate	Gasoline	12236.93655	464329.1064	32.94415895	32944.15895	51467.90578	464329.1064	868717.7888	16.88	LHDT1
San Bernardino (MD)	2027 LHDT1	Aggregate	Aggregate	Diesel	10382.56114	382582.5848	18.52374683	18523.74683		382582.5848			
San Bernardino (MD)	2027 LHDT1	Aggregate	Aggregate	Electricity	324.0115716	21806.0977	0	0		21806.0977			
San Bernardino (MD)	2027 LHDT2	Aggregate	Aggregate	Gasoline	1625.501605	60008.19906	4.810685273	4810.685273	14806.73288	60008.19906	238038.6474	16.08	LHDT2
San Bernardino (MD)	2027 LHDT2	Aggregate	Aggregate	Diesel	4609.596429	172724.7487	9.996047611	9996.047611		172724.7487			
San Bernardino (MD)	2027 LHDT2	Aggregate	Aggregate	Electricity	82.72499724	5305.699576	0	0		5305.699576			
San Bernardino (MD)	2027 MCY	Aggregate	Aggregate	Gasoline	17753.58837	101645.3447	2.45927065	2459.27065	2459.27065	101645.3447	101645.3447	41.33	MCY
San Bernardino (MD)	2027 MDV	Aggregate	Aggregate	Gasoline	102864.4143	4066676.874	199.2739452	199273.9452	202687.61	4066676.874	4247001.967	20.95	MDV
San Bernardino (MD)	2027 MDV	Aggregate	Aggregate	Diesel	1629.221988	63977.00557	2.658124755	2658.124755		63977.00557			
San Bernardino (MD)	2027 MDV	Aggregate	Aggregate	Electricity	1765.912839	63809.64436	0	0		63809.64436			
San Bernardino (MD)	2027 MDV	Aggregate	Aggregate	Plug-in Hybric	1106.835926	52538.44322	0.755540048	755.5400476		52538.44322			
San Bernardino (MD)	2027 MH	Aggregate	Aggregate	Gasoline	2537.344563	22132.90334	4.642709583	4642.709583	5622.15158	22132.90334	32390.38483	5.76	MH
San Bernardino (MD)	2027 MH	Aggregate	Aggregate	Diesel	1203.732966	10257.48149	0.979441997	979.4419971		10257.48149			
San Bernardino (MD)	2027 MHDT	Aggregate	Aggregate	Gasoline	851.4993437	63572.61874	11.94882571	11948.82571	29776.65146	63572.61874	235527.2767	7.91	MHDT
San Bernardino (MD)	2027 MHDT	Aggregate	Aggregate	Diesel	2894.94761	164867.3175	17.77661694	17776.61694		164867.3175			
San Bernardino (MD)	2027 MHDT	Aggregate	Aggregate	Electricity	87.70720254	6626.741831	0	0		6626.741831			
San Bernardino (MD)	2027 MHDT	Aggregate	Aggregate	Natural Gas	10.33883793	460.5986904	0.051208816	51.20881562		460.5986904			
San Bernardino (MD)	2027 OBUS	Aggregate	Aggregate	Gasoline	242.7542455	14272.10158	2.739920725	2739.920725	3417.473965	14272.10158	19807.83649	5.80	OBUS
San Bernardino (MD)	2027 OBUS	Aggregate	Aggregate	Diesel	80.83651185	5095.174015	0.67755324	677.5532396		5095.174015			
San Bernardino (MD)	2027 OBUS	Aggregate	Aggregate	Electricity	3.585157774	440.5608898	0	0		440.5608898			
San Bernardino (MD)	2027 SBUS	Aggregate	Aggregate	Gasoline	102.6708676	6684.892111	0.713082299	713.0822991	2611.048878	6684.892111	21497.64905	8.23	SBUS
San Bernardino (MD)	2027 SBUS	Aggregate	Aggregate	Diesel	635.5381207	14496.27372	1.897966579	1897.966579		14496.27372			
San Bernardino (MD)	2027 SBUS	Aggregate	Aggregate	Electricity	9.099422248	316.4832097	0	0		316.4832097			
San Bernardino (MD)	2027 UBUS	Aggregate	Aggregate	Gasoline	52.52046673	4916.496218	1.29529281	1295.29281	4481.902403	4916.496218	19376.45372	4.32	UBUS
San Bernardino (MD)	2027 UBUS	Aggregate	Aggregate	Diesel	1.40315264	125.2130251	0.012242667	12.24266678		125.2130251			
San Bernardino (MD)	2027 UBUS	Aggregate	Aggregate	Electricity	3.938840231	488.8184315	0	0		488.8184315			
San Bernardino (MD)	2027 UBUS	Aggregate	Aggregate	Natural Gas	104.9183223	13845.92604	3.174366926	3174.366926		13845.92604			

Source: EMFAC2021 (v1.0.2) Emissions Inventory
Region Type: Sub-Area
Region: San Bernardino (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 Y	hicle Categ	Model Year	Speed	Fuel	Population	Total VMT	Fuel_Consumption	Fuel_Consumption	Total Fuel	VMT	Total VMT	Miles per Gallon	Vehicle Class
San Bernardino (MD)	2028	HHDT	Aggregate	Aggregate	Gasoline	1.306791484	170.0730395	0.038309659	38.30965857	430703.66	170.0730395	2925630.856	6.79	HHDT
San Bernardino (MD)	2028	HHDT	Aggregate	Aggregate	Diesel	14136.16501	2867817.757	430.2218276	430221.8276		2867817.757			
San Bernardino (MD)	2028	HHDT	Aggregate	Aggregate	Electricity	302.0572048	54871.00155	0	0		54871.00155			
San Bernardino (MD)	2028	HHDT	Aggregate	Aggregate	Natural Gas	39.79816813	2772.024724	0.443522785	443.5227849		2772.024724			
San Bernardino (MD)	2028	LDA	Aggregate	Aggregate	Gasoline	302771.4783	12717619.84	402.9662046	402966.2046	410802.2342	12717619.84	14306954.22	34.83	LDA
San Bernardino (MD)	2028	LDA	Aggregate	Aggregate	Diesel	713.9726832	23256.59986	0.538607839	538.6078393		23256.59986			
San Bernardino (MD)	2028	LDA	Aggregate	Aggregate	Electricity	21713.72979	1059698.81	0	0		1059698.81			
San Bernardino (MD)	2028	LDA	Aggregate	Aggregate	Plug-in Hybric	10602.23016	506378.9645	7.297421757	7297.421757		506378.9645			
San Bernardino (MD)	2028	LDT1	Aggregate	Aggregate	Gasoline	27883.56151	962893.8825	37.14649166	37146.49166	37220.85919	962893.8825	974933.4866	26.19	LDT1
San Bernardino (MD)	2028	LDT1	Aggregate	Aggregate	Diesel	2.900352663	41.41821297	0.001627792	1.627792002		41.41821297			
San Bernardino (MD)	2028	LDT1	Aggregate	Aggregate	Electricity	128.6638067	6497.833547	0	0		6497.833547			
San Bernardino (MD)	2028	LDT1	Aggregate	Aggregate	Plug-in Hybric	106.4457971	5500.352307	0.072739733	72.73973279		5500.352307			
San Bernardino (MD)	2028	LDT2	Aggregate	Aggregate	Gasoline	147462.8531	6127689.663	234.7784769	234778.4769	236715.3533	6127689.663	6314328.613	26.67	LDT2
San Bernardino (MD)	2028	LDT2	Aggregate	Aggregate	Diesel	507.6747375	22079.90803	0.639498164	639.498164		22079.90803			
San Bernardino (MD)	2028	LDT2	Aggregate	Aggregate	Electricity	1968.393098	70582.59127	0	0		70582.59127			
San Bernardino (MD)	2028	LDT2	Aggregate	Aggregate	Plug-in Hybric	1919.217716	93976.45101	1.297378228	1297.378228		93976.45101			
San Bernardino (MD)	2028	LHDT1	Aggregate	Aggregate	Gasoline	11998.9685	457586.4945	31.79583897	31795.83897	49767.4395	457586.4945	863322.1877	17.35	LHDT1
San Bernardino (MD)	2028	LHDT1	Aggregate	Aggregate	Diesel	10126.24961	372277.8183	17.97160053	17971.60053		372277.8183			
San Bernardino (MD)	2028	LHDT1	Aggregate	Aggregate	Electricity	508.5320426	33457.87498	0	0		33457.87498			
San Bernardino (MD)	2028	LHDT2	Aggregate	Aggregate	Gasoline	1589.288273	58764.2317	4.626376462	4626.376462	14377.06159	58764.2317	236191.7685	16.43	LHDT2
San Bernardino (MD)	2028	LHDT2	Aggregate	Aggregate	Diesel	4553.215516	169284.5821	9.750685132	9750.685132		169284.5821			
San Bernardino (MD)	2028	LHDT2	Aggregate	Aggregate	Electricity	129.767152	8142.954666	0	0		8142.954666			
San Bernardino (MD)	2028	MCY	Aggregate	Aggregate	Gasoline	17627.7724	100789.0711	2.427252432	2427.252432	2427.252432	100789.0711	100789.0711	41.52	MCY
San Bernardino (MD)	2028	MDV	Aggregate	Aggregate	Gasoline	102414.1606	4062035.348	194.854013	194854.013	198232.9083	4062035.348	4257242.761	21.48	MDV
San Bernardino (MD)	2028	MDV	Aggregate	Aggregate	Diesel	1594.848087	62229.18108	2.54648102	2546.48102		62229.18108			
San Bernardino (MD)	2028	MDV	Aggregate	Aggregate	Electricity	2079.167521	74240.10374	0	0		74240.10374			
San Bernardino (MD)	2028	MDV	Aggregate	Aggregate	Plug-in Hybric	1246.019135	58738.12779	0.832414256	832.4142563		58738.12779			
San Bernardino (MD)	2028	MH	Aggregate	Aggregate	Gasoline	2377.993197	20877.52266	4.378453451	4378.453451	5334.082195	20877.52266	30882.69895	5.79	MH
San Bernardino (MD)	2028	MH	Aggregate	Aggregate	Diesel	1175.566549	10005.17629	0.955628745	955.6287446		10005.17629			
San Bernardino (MD)	2028	MHDT	Aggregate	Aggregate	Gasoline	834.3715097	62944.5021	11.70729117	11707.29117	29475.73021	62944.5021	239467.2514	8.12	MHDT
San Bernardino (MD)	2028	MHDT	Aggregate	Aggregate	Diesel	2932.415788	165558.4456	17.71580675	17715.80675		165558.4456			
San Bernardino (MD)	2028	MHDT	Aggregate	Aggregate	Electricity	140.5470197	10490.88219	0	0		10490.88219			
San Bernardino (MD)	2028	MHDT	Aggregate	Aggregate	Natural Gas	10.80237979	473.4214698	0.052632288	52.63228815		473.4214698			
San Bernardino (MD)	2028	OBUS	Aggregate	Aggregate	Gasoline	235.0407068	13636.7243	2.592757151	2592.757151	3268.752458	13636.7243	19450.69032	5.95	OBUS
San Bernardino (MD)	2028	OBUS	Aggregate	Aggregate	Diesel	82.82713993	5128.247141	0.675995306	675.9953062		5128.247141			
San Bernardino (MD)	2028	OBUS	Aggregate	Aggregate	Electricity	5.606300275	685.7188841	0	0		685.7188841			
San Bernardino (MD)	2028	SBUS	Aggregate	Aggregate	Gasoline	104.3240855	6840.929281	0.726215595	726.2155946	2603.878441	6840.929281	21729.20337	8.34	SBUS
San Bernardino (MD)	2028	SBUS	Aggregate	Aggregate	Diesel	635.9253592	14380.1551	1.877662847	1877.662847		14380.1551			
San Bernardino (MD)	2028	SBUS	Aggregate	Aggregate	Electricity	14.58309292	508.1189821	0	0		508.1189821			
San Bernardino (MD)	2028	UBUS	Aggregate	Aggregate	Gasoline	51.91794484	4836.643837	1.273662768	1273.662768	4222.05916	4836.643837	19415.32827	4.60	UBUS
San Bernardino (MD)	2028	UBUS	Aggregate	Aggregate	Diesel	1.375626096	123.1610314	0.012031852	12.03185215		123.1610314			
San Bernardino (MD)	2028	UBUS	Aggregate	Aggregate	Electricity	7.029014986	870.6956301	0	0		870.6956301			
San Bernardino (MD)	2028	UBUS	Aggregate	Aggregate	Natural Gas	102.7847794	13584.82777	2.93636454	2936.36454		13584.82777			

Source: EMFAC2021 (v1.0.2) Emissions Inventory
Region Type: Sub-Area
Region: San Bernardino (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 Y	hicle Categ	Model Year	Speed	Fuel	Population	Total VMT	Fuel_Consumption	Fuel_Consumption	Total Fuel	VMT	Total VMT	Miles per Gallon	Vehicle Class
San Bernardino (MD)	2029	HHDT	Aggregate	Aggregate	Gasoline	1.058205903	167.5422223	0.036251219	36.2512185	429001.8838	167.5422223	2992452.109	6.98	HHDT
San Bernardino (MD)	2029	HHDT	Aggregate	Aggregate	Diesel	14355.34954	2912422.022	428.5053283	428505.3283		2912422.022			
San Bernardino (MD)	2029	HHDT	Aggregate	Aggregate	Electricity	421.8202766	76948.78588	0	0		76948.78588			
San Bernardino (MD)	2029	HHDT	Aggregate	Aggregate	Natural Gas	41.15662549	2913.759625	0.460304256	460.3042559		2913.759625			
San Bernardino (MD)	2029	LDA	Aggregate	Aggregate	Gasoline	301581.5853	12706637.21	395.5691091	395569.1091	403488.7584	12706637.21	14388787.6	35.66	LDA
San Bernardino (MD)	2029	LDA	Aggregate	Aggregate	Diesel	639.2930001	20952.61878	0.478633947	478.6339469		20952.61878			
San Bernardino (MD)	2029	LDA	Aggregate	Aggregate	Electricity	23550.36276	1137859.666	0	0		1137859.666			
San Bernardino (MD)	2029	LDA	Aggregate	Aggregate	Plug-in Hybric	11066.24621	523338.0992	7.44101542	7441.01542		523338.0992			
San Bernardino (MD)	2029	LDT1	Aggregate	Aggregate	Gasoline	27202.82357	946660.7539	35.86952296	35869.52296	35958.26273	946660.7539	961389.2781	26.74	LDT1
San Bernardino (MD)	2029	LDT1	Aggregate	Aggregate	Diesel	1.637279695	25.02233625	0.000973778	0.973778217		25.02233625			
San Bernardino (MD)	2029	LDT1	Aggregate	Aggregate	Electricity	158.4232081	8027.762221	0	0		8027.762221			
San Bernardino (MD)	2029	LDT1	Aggregate	Aggregate	Plug-in Hybric	130.2429861	6675.739711	0.087765991	87.76599077		6675.739711			
San Bernardino (MD)	2029	LDT2	Aggregate	Aggregate	Gasoline	149903.3246	6235102.99	234.4365388	234436.5388	236505.0246	6235102.99	6444133.861	27.25	LDT2
San Bernardino (MD)	2029	LDT2	Aggregate	Aggregate	Diesel	522.5600891	22655.45595	0.64573211	645.7321097		22655.45595			
San Bernardino (MD)	2029	LDT2	Aggregate	Aggregate	Electricity	2319.375952	82326.67296	0	0		82326.67296			
San Bernardino (MD)	2029	LDT2	Aggregate	Aggregate	Plug-in Hybric	2148.541953	104048.7424	1.422753696	1422.753696		104048.7424			
San Bernardino (MD)	2029	LHDT1	Aggregate	Aggregate	Gasoline	11754.01027	449741.1003	30.66046561	30660.46561	48073.44998	449741.1003	859239.6844	17.87	LHDT1
San Bernardino (MD)	2029	LHDT1	Aggregate	Aggregate	Diesel	9867.984535	361670.8818	17.41298437	17412.98437		361670.8818			
San Bernardino (MD)	2029	LHDT1	Aggregate	Aggregate	Electricity	743.090569	47827.7023	0	0		47827.7023			
San Bernardino (MD)	2029	LHDT2	Aggregate	Aggregate	Gasoline	1551.719096	57406.91157	4.44398736	4443.98736	13935.77007	57406.91157	234582.9907	16.83	LHDT2
San Bernardino (MD)	2029	LHDT2	Aggregate	Aggregate	Diesel	4488.79035	165532.7821	9.491782709	9491.782709		165532.7821			
San Bernardino (MD)	2029	LHDT2	Aggregate	Aggregate	Electricity	189.5153467	11643.29702	0	0		11643.29702			
San Bernardino (MD)	2029	MCY	Aggregate	Aggregate	Gasoline	17523.14174	100050.2645	2.39913331	2399.13331	2399.13331	100050.2645	100050.2645	41.70	MCY
San Bernardino (MD)	2029	MDV	Aggregate	Aggregate	Gasoline	102062.5027	4059761.479	190.8708467	190870.8467	194213.5576	4059761.479	4269887.302	21.99	MDV
San Bernardino (MD)	2029	MDV	Aggregate	Aggregate	Diesel	1552.784584	60411.00845	2.433304716	2433.304716		60411.00845			
San Bernardino (MD)	2029	MDV	Aggregate	Aggregate	Electricity	2402.182972	84780.90073	0	0		84780.90073			
San Bernardino (MD)	2029	MDV	Aggregate	Aggregate	Plug-in Hybric	1387.566945	64933.914	0.909406124	909.4061241		64933.914			
San Bernardino (MD)	2029	MH	Aggregate	Aggregate	Gasoline	2228.023804	19725.07845	4.135675032	4135.675032	5068.926397	19725.07845	29492.59058	5.82	MH
San Bernardino (MD)	2029	MH	Aggregate	Aggregate	Diesel	1148.454302	9767.51213	0.933251365	933.2513648		9767.51213			
San Bernardino (MD)	2029	MHDT	Aggregate	Aggregate	Gasoline	816.1991858	61945.53404	11.41147399	11411.47399	29033.8509	61945.53404	243555.9371	8.39	MHDT
San Bernardino (MD)	2029	MHDT	Aggregate	Aggregate	Diesel	2952.075214	165444.2763	17.5686942	17568.6942		165444.2763			
San Bernardino (MD)	2029	MHDT	Aggregate	Aggregate	Electricity	212.6861035	15683.36029	0	0		15683.36029			
San Bernardino (MD)	2029	MHDT	Aggregate	Aggregate	Natural Gas	11.18148039	482.766476	0.053682714	53.68271423		482.766476			
San Bernardino (MD)	2029	OBUS	Aggregate	Aggregate	Gasoline	227.151954	12991.35059	2.447995765	2447.995765	3122.182883	12991.35059	19166.77109	6.14	OBUS
San Bernardino (MD)	2029	OBUS	Aggregate	Aggregate	Diesel	84.21624502	5161.187786	0.674187118	674.1871177		5161.187786			
San Bernardino (MD)	2029	OBUS	Aggregate	Aggregate	Electricity	8.334248258	1014.232716	0	0		1014.232716			
San Bernardino (MD)	2029	SBUS	Aggregate	Aggregate	Gasoline	105.6950484	6971.647286	0.736945466	736.9454656	2588.51756	6971.647286	21960.92722	8.48	SBUS
San Bernardino (MD)	2029	SBUS	Aggregate	Aggregate	Diesel	634.4665628	14217.80334	1.851572094	1851.572094		14217.80334			
San Bernardino (MD)	2029	SBUS	Aggregate	Aggregate	Electricity	22.11317215	771.4765967	0	0		771.4765967			
San Bernardino (MD)	2029	UBUS	Aggregate	Aggregate	Gasoline	49.86278313	4684.902143	1.232547349	1232.547349	4009.430728	4684.902143	19454.20281	4.85	UBUS
San Bernardino (MD)	2029	UBUS	Aggregate	Aggregate	Diesel	1.045307575	98.53710758	0.009502077	9.502076634		98.53710758			
San Bernardino (MD)	2029	UBUS	Aggregate	Aggregate	Electricity	12.19502919	1479.845869	0	0		1479.845869			
San Bernardino (MD)	2029	UBUS	Aggregate	Aggregate	Natural Gas	100.3308289	13190.91769	2.767381302	2767.381302		13190.91769			

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