APPLE VALLEY 84

ENERGY ANALYSIS

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LIST OF ABBREVIATED TERMS

%	Percent
(1)	Reference
APN	Assessor's Parcel Number
AQIA	Apple Valley 84 Air Quality Impact Analysis
BACM	Best Available Control Measures
BTU	British Thermal Units
Calero	California Emissions Estimator Model
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CCR	California Code of Regulations
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CPUC	California Public Utilities Commission
DMV	Department of Motor Vehicles
EIA	Energy Information Administration
EPA	Environmental Protection Agency
EMFAC	EMissions FACtor
FERC	Federal Energy Regulatory Commission
GHG	Greenhouse Gas
GPA	General Plan Amendment
GWh	Gigawatt Hour
HHDT	Heavy-Heavy Duty Trucks
hp-hr-gal	Horsepower Hours Per Gallon
IEPR	Integrated Energy Policy Report
ISO	Independent Service Operator
ISTEA	Intermodal Surface Transportation Efficiency Act
ITE	Institute of Transportation Engineers
kBTU	Thousand-British Thermal Units
kWh	Kilowatt Hour
LDA	Light Duty Auto
LDT1/LDT2	Light-Duty Trucks
LHDT1/LHDT2	Light-Heavy Duty Trucks
MDAB	Mojave Desert Air Basin
MDAQMD	Mojave Desert Air Quality Management District
MDV	Medium Duty Trucks
MHDT	Medium-Heavy Duty Trucks
MMcfd	Million Cubic Feet Per Day
mpg	Miles Per Gallon
MPO	Metropolitan Planning Organization
PG&E	Pacific Gas and Electric

Project	Apple Valley 84
SCE	Southern California Edison
SDAB	San Diego Air Basin
sf	Square Feet
SoCalGas	Southern California Gas
TEA-21	Transportation Equity Act for the 21st Century
Town	Town of Apple Valley
U.S.	United States
VMT	Vehicle Miles Traveled

EXECUTIVE SUMMARY

ES.1 SUMMARY OF FINDINGS

The results of this Apple Valley 84 *Energy Analysis* are summarized below based on the significance criteria in Section 5 of this report consistent with Appendix G of the CEQA Guidelines (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: Would the Project 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: Would the Project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	5.0	*Less Than Significant*	*n/a*

ES.2 PROJECT REQUIREMENTS

The Project would be required to comply with regulations imposed by the federal and state agencies that regulate energy use and consumption through various means and programs. Those that are directly and indirectly applicable to the Project and that would assist in the reduction of energy usage include:

- Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA)
- The Transportation Equity Act for the 21st Century (TEA-21)
- Integrated Energy Policy Report (IEPR)
- State of California Energy Plan
- California Code Title 24, Part 6, Energy Efficiency Standards
- California Code Title 24, Part 11, California Green Building Standards Code (CALGreen)
- AB 1493 Pavley Regulations and Fuel Efficiency Standards
- California's Renewable Portfolio Standard (RPS)

Consistency with the above regulations is discussed in detail in Section 5 of this report.

1 INTRODUCTION

This report presents the results of the energy analysis prepared by Urban Crossroads, Inc., for the proposed Apple Valley 84 (Project). The purpose of this report is to ensure that energy implication is considered by the Town of Apple Valley (Lead Agency), as the lead agency, and to quantify anticipated energy usage associated with construction and operation of the proposed Project, determine if the usage amounts are efficient, typical, or wasteful for the land use type, and to emphasize avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy.

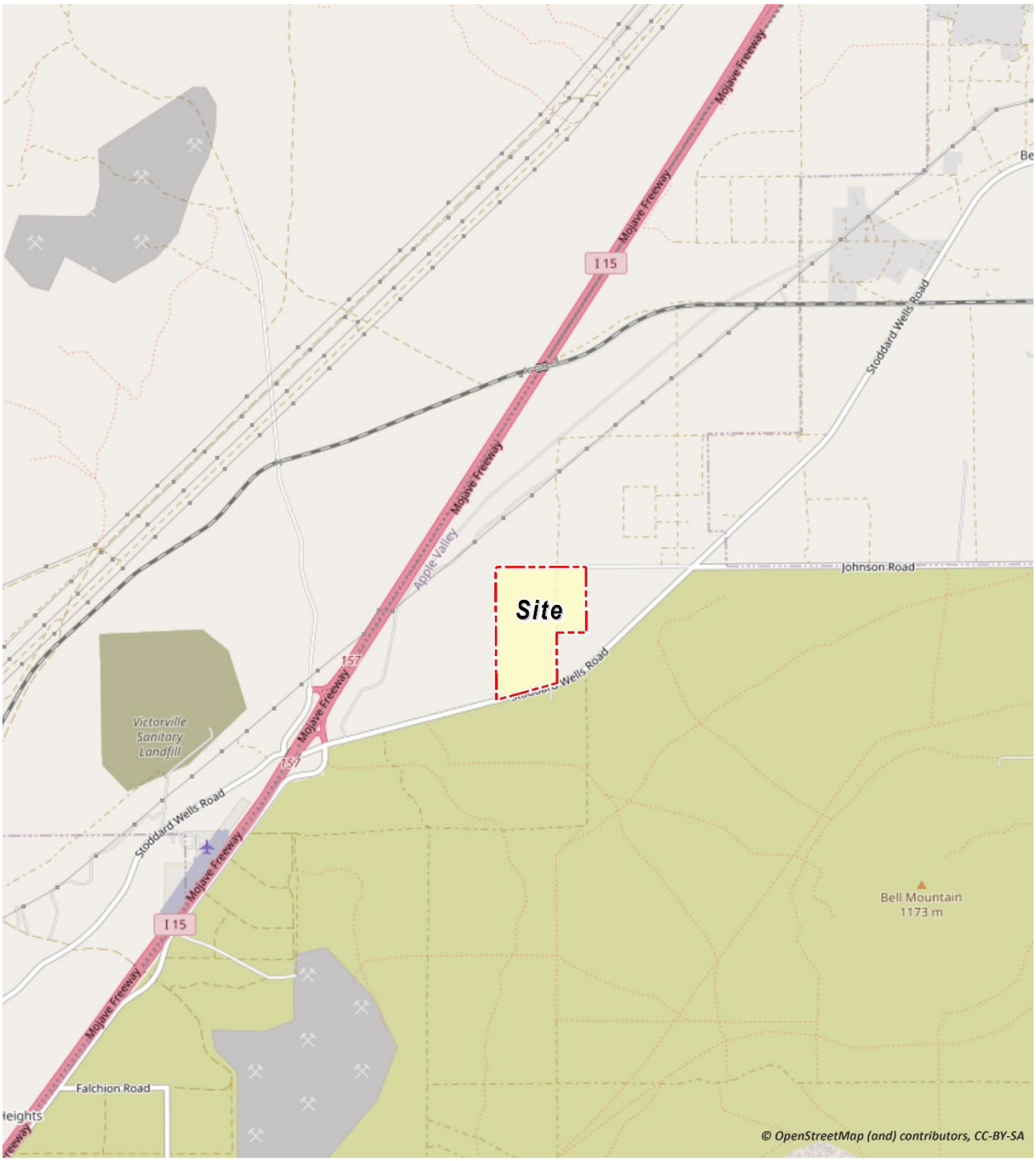
1.1 SITE LOCATION

The Project site is located north of Stoddard Wells Road and south of Johnson Road in the Town of Apple Valley, as shown in Exhibit 1-A.

1.2 PROJECT DESCRIPTION

The Project is proposed to consist of the development of a single industrial warehouse and distribution building totaling 1,381,412 square feet. It is proposed that the Project mix will assume 10% General Light Industrial, 15% High-Cube Cold Storage Warehouse use and 75% High-Cube Fulfillment (Non-Sort) Center Warehouse use. The Project is anticipated to have an Opening Year of 2028. A preliminary site plan for the proposed Project is shown in Exhibit 1-B.

EXHIBIT 1-A: LOCATION MAP



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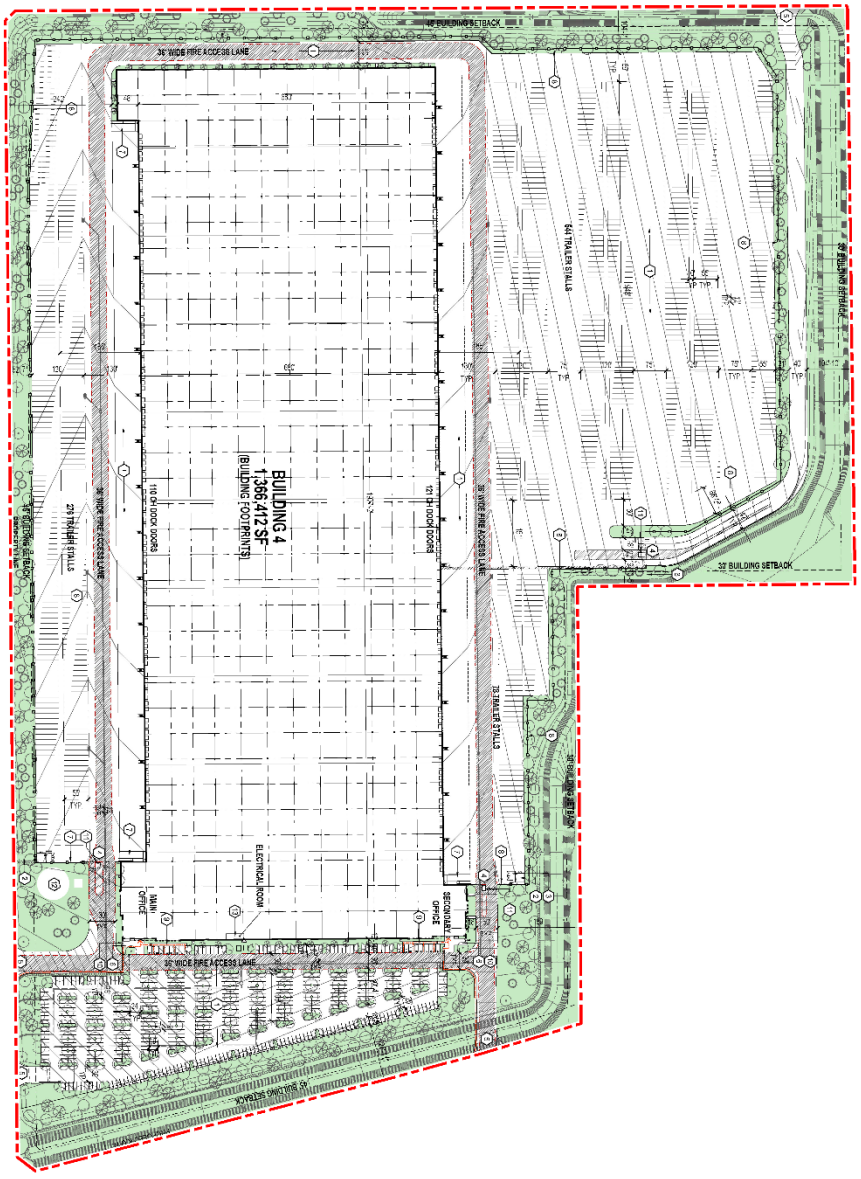
LEGEND:

Site Boundary

EXHIBIT 1-B: SITE PLAN



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LEGEND:

Site Boundary

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 2023, released by the United States (U.S.) Energy Information Administration's (EIA) California State Profile and Energy Estimates and includes (2):

- As of 2023, approximately 6,817 trillion British Thermal Unit (BTU) of energy was consumed
- As of 2023, approximately 648 million barrels of petroleum
- As of 2023, approximately 2,085 billion cubic feet of natural gas
- As of 2023, approximately 1,277 thousand short tons of coal

According to the EIA, in 2023 the U.S. petroleum consumption comprised about 89% of all transportation energy use (3). In 2024, about 252,048 million gallons (or about 6.001 million barrels) of finished petroleum products were consumed in the U.S., an average of about 690 million gallons per day (or about 16.43 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 2023, which shows approximate energy usage by each of the following sectors:

- 44.5% for transportation uses
- 21.4% for industrial uses
- 17.1% for residential uses
- 17.0% for commercial uses (6)

According to the EIA, California used approximately 239,480 million kilowatt hours (kWh) of electricity in 2023 (7). By sector in 2023, residential uses utilized 34.6% of the state's electricity, followed by 47.2% for commercial uses, 18.0% 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 21,036 million therms of natural gas in 2023 (8). In 2023 (the most recent year for which data is available), by sector, industrial uses utilized 31.6% of the state's natural gas, followed by 31.3% used as fuel in the electric power sector, 22.8% from residential, 12.7% from commercial, 1.5% 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 2024, total system electric generation for California was 278,338 gigawatt-hours (GWh), down 1 percent (2,802 GWh) from 2023. The total system electric generation is the sum of all utility-scale in-state generation plus net electricity imports from power plants with a nameplate capacity of at least one megawatt (MW). Clean energy resources accounted for 62%of California's power mix, a 4%

increase from 58% in 2023. In-state generation was 216,181 GWh in 2024, virtually unchanged from the 2023 value of 216,047 GWh. Imported energy decreased to 62,157 GWh, down 5% (3,361 GWh) from 2023 (9). Natural gas is the main source for electricity generation at 40.00% 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 2024, California was the fourth-largest total electricity producer in the nation. It is also the nation's third-largest electricity consumer and imports the second-largest amount of electricity of any state.
- In 2024, California was the eighth-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 in the nation and second-largest consumer of motor gasoline after Texas.
- California is the second-largest total energy consumer among the states, after Texas, but its per capita energy consumption is the third-lowest in the nation.
- In 2024, renewable resources, including hydroelectric power and small-scale solar power, supplied 57% of California's in-state electricity generation. Natural gas fueled another 35% and nuclear power provided almost all the rest.

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 2024)

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	263	0.12%	124	5,775	5,899	6,162	2.21%
Natural Gas	86,479	40.00%	84	8,091	8,176	94,655	34.01%
Oil	36	0.02%	-	0	0	36	0.01%
Other (Waste Heat/Petroleum Coke)	198	0.09%	13	9	22	220	0.08%
Unspecified	-	0.00%	80	3,971	4,051	4,051	1.46%
Total Thermal and Unspecified	*86,976*	*40.23%*	*301*	*17,846*	*18,147*	*105,123*	*37.77%*
Nuclear	18,379	8.50%	208	9,026	9,234	27,613	9.92%
Large Hydro	25,222	11.67%	4,479	1,079	5,558	30,780	11.06%
Biomass	4,754	2.20%	614	26	640	5,394	1.94%
Geothermal	10,453	4.84%	212	2,139	2,351	12,803	4.60%
Small Hydro	3,969	1.84%	269	2	270	4,240	1.52%
Solar	50,666	23.44%	536	8,081	8,616	59,283	21.30%
Wind	15,761	7.29%	9,195	8,145	17,341	33,102	11.89%
Total Non-GHG and Renewable Resources	*129,205*	*59.77%*	*15,512*	*28,498*	*44,010*	*173,215*	*62.23%*
System Totals	*216,181*	*100.00%*	*15,813*	*46,344*	*62,157*	*278,338*	*100.00%*

Source: CECs 2024 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). While the once-through cooling phase-out has been ongoing since the May 2010 adoption of the State Water Resources Control Board's once-through cooling policy, the retirement of San Onofre complicated the situation. California 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). SCE provides electric power to more than 15 million persons in 15 counties and in 180 incorporated cities, within a service area encompassing approximately 50,000 square miles. Based on SCE's 2023 Power Content Label Mix, SCE derives electricity from varied energy resources including: fossil fuels, hydroelectric generators, nuclear power plants, geothermal power plants, solar power generation, and wind farms. SCE also purchases from independent power producers and utilities, including out-of-state suppliers (13).

Table 2-2, SCE's specific proportional shares of electricity sources in 2023. As indicated in Table 2-2, the 2023 SCE Power Mix has renewable energy at 37.6% of the overall energy resources. Biomass

and waste resources are at 0.1%, geothermal resources are at 5.2%, eligible hydroelectric resources are at 0.7%, solar energy is at 19.8%, and wind power is at 11.7% (14).

TABLE 2-2: SCE 2023 POWER CONTENT MIX

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

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

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.

2.4 TRANSPORTATION ENERGY RESOURCES

The Project would generate additional vehicle trips with resulting consumption of energy resources, predominantly gasoline and diesel fuel. On January 1, 2025, the Department of Motor Vehicles (DMV) reported 35.9 million registered vehicles in California, which, based on data from the 2021 version of the EMissions FACtor (EMFAC) model, are estimated to consume approximately 17.5 billion gallons of fuel annually (16).[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 (6). While gasoline consumption has been declining since 2008 it is still by far the dominant fuel.

[1] Fuel consumptions estimated utilizing information from EMFAC2021.

California is the second-largest consumer of petroleum products, after Texas, and accounts for 9% of the nation's total consumption. The State is the largest U.S. consumer of jet fuel and the second largest U.S. consumer of motor gasoline. 86% of the petroleum consumed in California is used in the transportation sector (17).

California accounts for less than 1% of total U.S. natural gas reserves and production. As with crude oil, California's natural gas production has experienced a gradual decline since 1985. In 2024, about 31% of the natural gas delivered to consumers went to the State's industrial sector, and about 30% was delivered to the electric power sector. Natural gas fueled more than two-fifths of the State's utility-scale electricity generation in 2024. The residential sector, where three-fifths of California households use natural gas for home heating, accounted for 22% of natural gas deliveries. The commercial sector received 15% of the deliveries to end users and the transportation sector consumed the remaining 1% (17).

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3 REGULATORY BACKGROUND

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

3.1 FEDERAL REGULATIONS

3.1.1 Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA)

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

3.1.2 The Transportation Equity Act for the 21st Century (TEA-21)

The TEA-21 was signed into law in 1998 and builds upon the initiatives established in the ISTEA legislation, discussed above. 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 (18).

3.2.2 State of California Energy Plan

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

3.2.3 Title 24 Energy Efficiency Standards and California Green Building Standards

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

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

The 2022 California Title 24 Energy Standards became effective on January 1, 2023, with updates for the 2025 standards set to take effect on January 1, 2026. As the Project is expected to be completed in 2028, it will need to comply with the Title 24 Energy Standards in effect at that time, which may include further updates beyond the 2025 version.

CALGreen is updated on a regular basis, with the most recent approved update consisting of the 2025 California Green Building Code Standards that go into effect on January 1, 2026. The Project would be required to comply with the applicable standards in place at the time plan check submittals are made.

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 52% of total retail sales by 2027 (19).

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

Appendix F of the *State CEQA Guidelines* (20) 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* (21), 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 *Apple Valley 84 Air Quality Impact Analysis* (AQIA) (22) 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 pollutants and GHG emissions from direct and indirect sources as well as energy usage (23). Accordingly, the latest version of CalEEMod has been used to determine the proposed Project's anticipated transportation and facility energy demands. Outputs from the annual model runs are provided in Appendix 4.1.

4.2.2 Emission Factors Model

On May 2, 2022, the EPA approved the 2021 version of the EMissions FACtor model (EMFAC) 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 (24). This energy study utilizes the different fuel types for each vehicle class from the annual EMFAC2021 emission inventory in order to derive the average vehicle fuel economy which is then used to determine the estimated annual fuel consumption associated with vehicle usage during Project construction and operational activities. For purposes of analysis, the 2026 through 2028

analysis years were utilized to determine the average vehicle fuel economy used throughout the duration of the Project. Output from the EMFAC2021 model run is provided in Appendix 4.2.

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 will begin December 2026 and would last through November 2028 (22). The construction schedule utilized in the analysis, shown in Table 4-1, represents a "worst-case" analysis scenario. The duration of construction activity and associated equipment represents a reasonable approximation of the expected construction fleet as required per *CEQA Guidelines* (25).

Table 4-1: Construction Duration

Construction Activity	Start Date	End Date	Days
Demolition	12/1/2026	12/7/2026	5
Site Preparation	12/8/2026	1/13/2027	27
Grading	1/14/2027	3/17/2027	45
Building Construction	3/18/2027	9/13/2028	390
Paving	9/14/2028	11/22/2028	50
Architectural Coating	9/14/2028	11/22/2028	50

Project Construction Power Cost

The *2025 National Construction Estimator* identifies a typical power cost per 1,000 sf of construction per month of $2.85, which was used to calculate the Project's total construction power cost (26). As shown in Table 4-2, the total power cost of on-site electricity usage during the building construction of the Project is estimated to be approximately $90,551.56.

Table 4-2: Construction Power Cost

Land Use	Power Cost	Total Building Size (1,000 SF)	Construction Duration (months)	Total Project Construction Power Cost
General Light Industrial	$2.85	138.141	23	$9,055.14
High-Cube Cold Storage	$2.85	207.212	23	$13,582.75
High-Cube Fulfillment	$2.85	1036.059	23	$67,913.67
			Total Project Construction Cost	$90,551.56

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 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 June 1, 2025, SCE's general service rate is $0.17 per kWh of electricity for industrial uses (27). As shown in Table 4-3, the total electricity usage from on-site Project construction related activities is estimated to be approximately 532,656 kWh.

TABLE 4-3: CONSTRUCTION ELECTRICITY USAGE

Land Use	Cost per kWh	Total Project Construction Electricity Usage
General Light Industrial	$0.17	53,266
High-Cube Cold Storage	$0.17	79,899
High-Cube Fulfillment	$0.17	399,492
Total Project Construction Electricity Usage (kWh)		532,656

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 at 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 code.

TABLE 4-4: CONSTRUCTION EQUIPMENT ASSUMPTIONS

Construction Activity	Equipment	Quantity	Hours
Demolition	Excavators	1	8
Site Preparation	Rubber Tired Dozers	2	8
	Crawler Tractors	3	8
Grading	Excavators	1	8
	Graders	2	8
	Rubber Tired Dozers	2	8
	Scrapers	6	8
	Crawler Tractors	3	8

Construction Activity	Equipment	Quantity	Hours
Building Construction	Cranes	1	8
	Forklifts	5	8
	Generator Sets	2	8
	Tractors/Loaders/Backhoes	5	8
	Welders	2	8
Paving	Pavers	3	8
	Paving Equipment	3	8
	Rollers	3	8
Architectural Coating	Air Compressors	2	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 (28). For the purposes of this analysis, the calculations are based on all construction equipment being diesel-powered which is consistent with industry standards. Diesel fuel would be supplied by existing industrial fuel providers serving the Project area and region.[2] As presented in Table 4-5, Project construction activities would consume an estimated 113,402 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.

[2] 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 ESTIMATE

Activity	Duration (Days)	Equipment	HP Rating	Quantity	Usage Hours	Load Factor	HP-hrs/day	Total Fuel Consumption
Demolition	5	Excavators	36	1	8	0.38	109	30
Site Preparation	27	Rubber Tired Dozers	367	2	8	0.4	2,349	3,428
		Crawler Tractors	87	3	8	0.43	898	1,310
Grading	45	Excavators	36	1	8	0.38	109	266
		Graders	148	2	8	0.41	971	2,362
		Rubber Tired Dozers	367	2	8	0.4	2,349	5,713
		Scrapers	423	6	8	0.48	9,746	23,706
		Crawler Tractors	87	3	8	0.43	898	2,184
Building Construction	390	Cranes	367	1	8	0.29	851	17,949
		Forklifts	82	5	8	0.2	656	13,829
		Generator Sets	14	2	8	0.74	166	3,494
		Tractors/Loaders/Backhoes	84	5	8	0.37	1,243	26,208
		Welders	46	2	8	0.45	331	6,982
Paving	50	Pavers	81	3	8	0.42	816	2,207
		Paving Equipment	89	3	8	0.36	769	2,078
		Rollers	36	3	8	0.38	328	887
Architectural Coating	50	Air Compressors	37	2	8	0.48	284	768
							Construction Fuel Demand (Gallons Fuel)	113,402

4.3.4 Construction Trips and VMT

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

TABLE 4-6: CONSTRUCTION TRIPS AND VMT

Construction Activity	Worker Trips Per Day	Vendor Trips Per Day	Hauling Trips Per Day
Demolition	3	2	2
Site Preparation	13	12	0
Grading	35	20	14
Building Construction	580	170	0
Paving	23	11	0
Architectural Coating	116	11	0

4.3.5 Construction Worker Fuel Estimates

With respect to estimated VMT for the Project, the construction worker trips would generate an estimated 4,351,997 VMT during the 23 months of construction (22). 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[3]), and 25% are from light-duty-trucks (LDT2[4]). 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 (24). EMFAC2021 was run for the LDA, LDT1, and LDT2 vehicle class within the California sub-area for the 2026 through 2028 calendar years. Data from EMFAC2021 is shown in Appendix 4.2.

Table 4-7 provides an estimated annual fuel consumption resulting from Project construction worker trips. Based on Table 4-7, it is estimated that 146,590 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.

[3] 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.

[4] 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)
2026	LDA						
	Demolition	5	2	18.5	185	33.14	6
	Site Preparation	18	7	18.5	2,331	33.14	70
	LDT1						
	Demolition	5	1	18.5	93	25.20	4
	Site Preparation	18	4	18.5	1,332	25.20	53
	LDT2						
	Demolition	5	1	18.5	93	25.48	4
	Site Preparation	18	4	18.5	1,332	25.48	52
2027	LDA						
	Site Preparation	9	7	18.5	1,166	33.96	34
	Grading	45	18	18.5	14,985	33.96	441
	Building Construction	207	290	18.5	1,110,555	33.96	32,706
	LDT1						
	Site Preparation	9	4	18.5	666	25.66	26
	Grading	45	9	18.5	7,493	25.66	292
	Building Construction	207	145	18.5	555,278	25.66	21,642

Year	Construction Activity	Duration (Days)	Worker Trips/Day	Trip Length (miles)	VMT	Average Vehicle Fuel Economy (mpg)	Estimated Fuel Consumption (gallons)
2027	LDT2						
	Site Preparation	9	4	17.5	630	26.06	24
	Grading	45	9	18.5	7,493	26.06	287
	Building Construction	207	145	18.5	555,278	26.06	21,305
2028	LDA						
	Building Construction	183	290	18.5	981,795	34.83	28,191
	Paving	50	12	18.5	11,100	34.83	319
	Architectural Coating	50	58	18.5	53,650	34.83	1,540
	LDT1						
	Building Construction	183	145	18.5	490,898	26.19	18,741
	Paving	50	6	18.5	5,550	26.19	212
	Architectural Coating	50	29	18.5	26,825	26.19	1,024
	LDT2						
	Building Construction	183	145	18.5	490,898	26.67	18,403
	Paving	50	6	18.5	5,550	26.67	208
	Architectural Coating	50	29	18.5	26,825	26.67	1,006
						Total Construction Worker Fuel Consumption (Gallons)	146,590

4.3.6 Construction Vendor/Hauling Fuel Estimates

With respect to estimated VMT, the construction vendor/hauling trips (vehicles that deliver materials to the site during construction) would generate an estimated 713,887 VMT along area roadways for the Project over the duration of construction activity (22). 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 AQIA (22). 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 California sub-area for the 2026 through 2028 calendar years. Data from EMFAC2021 is shown in Appendix 4.2.

As previously shown in Table 4-8, it is estimated that 99,063 gallons of fuel will be consumed related to construction vendor/hauling trips during full construction of the Project. It should be noted that Project construction vendor/hauling trips would represent a "single-event" diesel fuel demand and would not require on-going or permanent commitment of diesel fuel resources for this purpose.

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

Year	Construction Activity	Duration (Days)	Vendor/Hauling Trips/Day	Trip Length (miles)	VMT	Average Vehicle Fuel Economy (mpg)	Estimated Fuel Consumption (gallons)
2026	MHDT (Vendor)						
	Demolition	5	1	10.2	51	7.75	7
	Site Preparation	18	6	10.2	1,102	7.75	142
	HHDT (Vendor)						
	Demolition	5	1	10.2	51	6.46	8
	Site Preparation	18	6	10.2	1,102	6.46	171
	HHDT (Hauling)						
	Demolition	5	2	20	200	6.46	31
2027	MHDT						
	Site Preparation	9	6	10.2	551	7.91	70
	Grading	45	10	10.2	4,590	7.91	580
	Building Construction	207	85	10.2	179,469	7.91	22,689
	HHDT (Vendor)						
	Site Preparation	9	6	10.2	551	6.61	83
	Grading	45	10	10.2	4,590	6.61	694
	Building Construction	207	85	10.2	179,469	6.61	27,133
	Grading	45	14	20	12,600	4.32	2,914
2028	MHDT (Vendor)						
	Building Construction	183	85	10.2	158,661	8.12	19,529
	Paving	50	6	10.2	3,060	8.12	377

Year	Construction Activity	Duration (Days)	Vendor/Hauling Trips/Day	Trip Length (miles)	VMT	Average Vehicle Fuel Economy (mpg)	Estimated Fuel Consumption (gallons)
2028	Architectural Coating	50	6	10.2	3,060	8.12	377
	HHDT (Vendor)						
	Building Construction	183	85	10.2	158,661	6.79	23,358
	Paving	50	6	10.2	3,060	6.79	450
	Architectural Coating	50	6	10.2	3,060	6.79	450
Total Construction Vendor/Hauling Fuel Consumption (Gallons)							99,063

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. Section 2449(d)(3) requires that grading plans shall reference the requirement that a sign shall be posted on-site stating that construction workers need to shut off engines at or before five minutes of idling." In this manner, construction equipment operators are required to be informed that engines are to be turned off at or prior to five minutes of idling. 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), fuel demands from operational equipment, and facilities energy demands (energy consumed by building 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 (24). EMFAC2021 was run for the San Bernardino (MD) area for the 2028 calendar year. Data from EMFAC2021 is shown in Appendix 4.2.

As summarized in Table 4-9, the Project would result in 18,465,616 annual VMT and an estimated annual fuel consumption of 1,492,571 gallons of fuel.

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

Vehicle Type	Average Vehicle Fuel Economy (mpg)	Annual VMT	Estimated Annual Fuel Consumption
LDA	35.66	4,826,362	135,340
LDT1	26.74	404,182	15,117
LDT2	27.25	2,182,606	80,103
MDV	21.99	1,542,678	70,168
LHDT1	17.87	1,610,255	90,092
LHDT2	16.83	446,234	26,509
MHDT	8.39	1,659,138	197,783
HHDT	6.98	5,540,807	794,337
MCY	41.70	253,354	6,075
TRU			77,046
Total Annual Fuel Consumption (Gallons)		18,465,616	1,492,571

4.4.2 On-Site Cargo Handling Equipment Fuel Demands

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 Five (5) 175 horsepower (hp), natural gas-powered cargo handling equipment – port tractor operating at 4 hours a day[5] for 365 days of the year.

[5] 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

Project operational activity estimates and associated fuel consumption estimates are based on the annual EMFAC 2021 offroad emissions for the 2028 operational year and were used to derive the total annual fuel consumption associated on-site equipment. As presented in Table 4-10, Project on-site equipment would consume an estimated 23,209 gallons of diesel gas.

TABLE 4-10: ON-SITE CARGO HANDLING EQUIPMENT FUEL CONSUMPTION ESTIMATES

Equipment	Quantity	Usage Hours	Days of Operation	EMFAC 2021 Fuel Consumption (gal./yr)	EMFAC 2021 Activity (hrs./yr)	Total Fuel Consumption
Forklift	5	4	365	20,401	6,417	23,209
On-site Cargo Handling Equipment Fuel Demand (Gallons)						23,209

4.4.3 Emergency Generator Fuel Demands

It is anticipated that the Project would utilize one (1) 300-hp diesel-powered emergency backup generator and one (1) diesel-powered fire pump. For analytical purposes, it is anticipated that the emergency generator would operate for a maximum time of 1 hour per day and 50 hours per year for maintenance and testing purposes. As presented in Table 4-11, emergency engine operation for maintenance and testing purposes would consume an estimated 1,883 gallons of diesel fuel per year.

TABLE 4-11: EMERGENCY ENGINE FUEL CONSUMPTION ESTIMATES

Equipment	Horsepower	Fuel Consumption (gal./hour)	Activity (hrs./yr)	Total Fuel Consumption (gal./year)
Fire Pump	300	11	50	565
Generator	700	26	50	1,318
Emergency Engine Fuel Demand (Gallon)				1,883

4.4.4 Facility Energy Demands

Project building operations activities would result in the consumption of electricity which would be supplied to the Project by SCE. As summarized in Table 4-12, the Project would result in 11,238,124 kWh/year of electricity demand.

Based on information provided by the Project Applicant, the Project would not use natural gas for the building envelope. As such, natural gas consumption has not been analyzed in this study.

operate up to 4 hours per day.

TABLE 4-12: PROJECT ANNUAL OPERATIONAL ENERGY DEMAND SUMMARY

Land Use	Electricity (kWh/year)
General Light Industrial	1,317,551
High-Cube Cold Storage	4,536,998
High-Cube Fulfillment	4,785,249
Parking Lot	598,326
Total Energy Usage	11,238,124

4.4.5 Operational Energy Efficiency/Conservation Measures

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

The Project would also not result in a substantial increase in demand for transmission service, resulting in the need for new or expanded sources of energy supply or new or expanded energy delivery systems or infrastructure (other than site-adjacent and on-site connects to local utilities).

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. Location of the Project proximate to regional and local roadway systems tends to reduce VMT within the region, acting to reduce regional vehicle energy demands.

4.5 SUMMARY

4.5.1 Construction Energy Demands

The estimated power cost of on-site electricity usage during the building construction of the Project is assumed to be approximately $90,551.56, as summarized on Table 4-2. Additionally, based on the assumed power cost, it is estimated that the total electricity usage during construction, after full Project build-out, is calculated to be approximately 532,656 kWh, as summarized on Table 4-3.

Construction equipment used by the Project would result in single event consumption of approximately 113,402 gallons of diesel fuel, as summarized on Table 4-5. 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 146,590 gallons of fuel, as summarized on Table 4-7. Additionally, fuel consumption from construction vendor and hauling trips (MHDTs and HHDTs) will total approximately 99,063 gallons, as summarized on Table 4-8. Diesel fuel would be supplied by the Town and regional industrial vendors. Indirectly, construction energy efficiencies and energy conservation would be achieved using bulk purchases, transport and use of construction materials. The 2023 IEPR released by the CEC has shown that fuel efficiencies are getting better within on and off-road vehicle engines due to more stringent government requirements (29). 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 1,492,571 gallons of fuel, as summarized on Table 4-9.

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 (12th Ed., 2025); 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 will need to have 2010 model year engines or equivalent (30).
- 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.

On-Site Cargo Handling Equipment Fuel Demands

As previously stated, it is common for industrial buildings to require the operation of exterior cargo handling equipment in the building's truck court areas. On-site cargo handling equipment used by the Project would result in approximately 23,209 gallons of diesel gas. On-site equipment use of fuel would not be atypical for the type of construction proposed because there are no aspects of the Project's proposed operations that are unusual or energy-intensive, and Project on-site equipment would conform to the applicable CARB emissions standards, acting to promote equipment fuel efficiencies.

Emergency Generator Fuel Demands

The proposed Project is expected to include the installation of one diesel-powered emergency generator and one diesel-powered fire pump. Operation of these engines for maintenance and testing purposes is estimated to result in annual fuel demand of approximately 1,883 gallons.

Facility Energy Demands

Project facility operational energy demands are estimated at: 11,238,124 kWh/year of electricity for the Project, which would be supplied by SCE. Based on information provided by the Project Applicant, the Project would not use natural gas. As such, natural gas consumption has not been analyzed in this study. 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 the Project, construction-related vehicle trips would result in approximately 5,065,883 VMT and consume an estimated 245,654 gallons of gasoline and diesel combined during construction. Additionally, on-site construction equipment would consume an estimated 113,402 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 and Natural Gas

Operation of the proposed Project would consume energy as part of building operations and transportation activities including truck and passenger vehicle traffic. Building operations would involve energy consumption for multiple purposes including, but not limited to, building heating and cooling, refrigeration, lighting, and electronics. Based on client provided energy use estimations, operations for the Project would result in approximately 11,238,124 kWh/year of electricity annually. Based on information provided by the Project Applicant, the Project would not use natural gas. As such, natural gas consumption has not been analyzed in this study.

The proposed 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 and would help reduce the amount of energy required for lighting, water heating, and heating and air conditioning in the proposed building and promote energy conservation.

Fuel

Operational energy would also be consumed during vehicle trips associated with the proposed Project. Fuel consumption would be primarily related to vehicle use by passenger cars and trucks associated with the Project. Based on CalEEMod energy use estimations, project-related vehicle trips would result in approximately 18,465,616 VMT and consume an estimated 1,492,571 gallons of gasoline and diesel combined, annually (see Appendix 4.1).

The Project will also be providing parking and EV 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 used during construction, 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 11,238,124 kWh/year of electricity Project annually.

The proposed Projects 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 the proposed building and promote energy conservation.

Compliance with the aforementioned mandatory measures would ensure that 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, operational energy efficiency and renewable energy standards consistency impacts would be less than significant.

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5 CERTIFICATION

The contents of this energy analysis report represent an accurate depiction of the environmental impacts associated with the proposed Apple Valley 84 Project. The information contained in this energy analysis 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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Bachelor of Arts in Environmental Analysis and Design
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Professional Affiliations

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

Professional Certifications

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
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APPENDIX 4.1:

CALEEMOD EMISSIONS MODEL OUTPUTS

16408 - Bell Mountain Commerce Center Construction and Operations Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	16408 - Bell Mountain Commerce Center Construction and Operations
Construction Start Date	12/1/2026
Operational Year	2028
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	5.00
Precipitation (days)	12.4
Location	34.594764, -117.244659
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	2022.1.1.30

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	138	1000sqft	3.17	138,141	84,424	—	—	General Light Industrial

Refrigerated Warehouse-Rail	207	1000sqft	4.76	207,212	126,637	—	—	High-Cube Cold Storage PC
Unrefrigerated Warehouse-No Rail	1,036	1000sqft	23.8	1,036,059	633,185	—	—	High-Cube Fulfillment (Non-Sort)
Parking Lot	1,426	Space	15.7	0.00	0.00	—	—	—
Other Asphalt Surfaces	45.3	Acre	45.3	0.00	0.00	—	—	—
User Defined Industrial	1,381	User Defined Unit	0.00	0.00	0.00	—	—	PC Trips

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.	148	148	22.9	65.6	0.08	0.61	9.04	9.65	0.57	2.18	2.75	—	17,172	17,172	0.26	0.99	37.4	17,511
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	148	148	64.7	64.2	0.16	2.81	9.04	9.65	2.59	2.22	4.81	—	18,408	18,408	0.68	1.01	0.97	18,537
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	22.6	22.3	21.9	39.8	0.07	0.72	5.99	6.72	0.67	1.54	2.21	—	11,687	11,687	0.25	0.62	9.39	11,887
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unmit.	4.12	4.07	4.00	7.26	0.01	0.13	1.09	1.23	0.12	0.28	0.40	—	1,935	1,935	0.04	0.10	1.55	1,968

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	5.16	4.50	22.9	65.6	0.08	0.61	9.04	9.65	0.57	2.18	2.75	—	17,172	17,172	0.26	0.99	37.4	17,511
2028	148	148	21.8	62.6	0.08	0.55	9.04	9.59	0.52	2.18	2.70	—	16,884	16,884	0.26	0.99	33.4	17,219
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	3.22	2.71	24.3	22.3	0.04	1.24	4.09	5.32	1.14	1.86	3.00	—	4,337	4,337	0.16	0.09	0.04	4,368
2027	8.93	7.51	64.7	64.2	0.16	2.81	9.04	9.65	2.59	2.22	4.81	—	18,408	18,408	0.68	1.01	0.97	18,537
2028	148	148	22.3	49.9	0.08	0.55	9.04	9.59	0.52	2.18	2.70	—	15,977	15,977	0.27	0.99	0.87	16,280
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.15	0.13	1.16	1.07	< 0.005	0.06	0.20	0.25	0.05	0.09	0.14	—	209	209	0.01	< 0.005	0.04	211
2027	3.95	3.38	21.9	39.8	0.07	0.72	5.99	6.72	0.67	1.54	2.21	—	11,687	11,687	0.25	0.62	9.39	11,887
2028	22.6	22.3	13.2	30.1	0.04	0.34	4.78	5.12	0.31	1.15	1.47	—	8,826	8,826	0.15	0.52	7.67	8,993
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.03	0.02	0.21	0.19	< 0.005	0.01	0.04	0.05	0.01	0.02	0.03	—	34.7	34.7	< 0.005	< 0.005	0.01	34.9
2027	0.72	0.62	4.00	7.26	0.01	0.13	1.09	1.23	0.12	0.28	0.40	—	1,935	1,935	0.04	0.10	1.55	1,968
2028	4.12	4.07	2.40	5.49	0.01	0.06	0.87	0.93	0.06	0.21	0.27	—	1,461	1,461	0.03	0.09	1.27	1,489

2.4. Operations Emissions Compared Against Thresholds

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

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	57.3	55.0	92.4	199	1.10	2.27	54.1	56.3	2.15	14.1	16.2	1,334	127,444	128,778	137	14.7	526	137,123
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	45.7	44.2	96.7	111	1.07	2.16	54.1	56.2	2.07	14.1	16.2	1,334	124,538	125,873	137	14.8	232	133,939
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	46.2	44.8	69.2	114	0.79	1.49	39.2	40.7	1.41	10.2	11.6	1,334	94,485	95,819	137	11.3	319	102,916
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	8.43	8.18	12.6	20.7	0.14	0.27	7.16	7.43	0.26	1.87	2.12	221	15,643	15,864	22.7	1.86	52.9	17,039

2.5. Operations Emissions by Sector, Unmitigated

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

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	13.1	11.7	87.3	135	1.09	1.92	54.1	56.0	1.83	14.1	15.9	—	113,879	113,879	1.01	13.1	301	118,104
Area	42.4	41.6	0.51	60.1	< 0.005	0.11	—	0.11	0.08	—	0.08	—	247	247	0.01	< 0.005	—	248
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	10,659	10,659	1.02	0.12	—	10,721
Water	—	—	—	—	—	—	—	—	—	—	—	612	1,820	2,432	62.9	1.51	—	4,456
Waste	—	—	—	—	—	—	—	—	—	—	—	722	0.00	722	72.2	0.00	—	2,527
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	224	224
Stationary	1.80	1.64	4.59	4.18	0.01	0.24	0.00	0.24	0.24	0.00	0.24	0.00	840	840	0.03	0.01	0.00	842
Total	57.3	55.0	92.4	199	1.10	2.27	54.1	56.3	2.15	14.1	16.2	1,334	127,444	128,778	137	14.7	526	137,123

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	12.2	10.9	92.1	107	1.07	1.92	54.1	56.0	1.83	14.1	15.9	—	111,220	111,220	1.04	13.1	7.82	115,169
Area	31.7	31.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	10,659	10,659	1.02	0.12	—	10,721
Water	—	—	—	—	—	—	—	—	—	—	—	612	1,820	2,432	62.9	1.51	—	4,456
Waste	—	—	—	—	—	—	—	—	—	—	—	722	0.00	722	72.2	0.00	—	2,527
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	224	224
Stationary	1.80	1.64	4.59	4.18	0.01	0.24	0.00	0.24	0.24	0.00	0.24	0.00	840	840	0.03	0.01	0.00	842
Total	45.7	44.2	96.7	111	1.07	2.16	54.1	56.2	2.07	14.1	16.2	1,334	124,538	125,873	137	14.8	232	133,939
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	8.96	8.00	68.3	83.5	0.78	1.40	39.2	40.6	1.34	10.2	11.6	—	81,769	81,769	0.77	9.62	95.2	84,751
Area	37.0	36.6	0.25	29.6	< 0.005	0.05	—	0.05	0.04	—	0.04	—	122	122	0.01	< 0.005	—	122
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	10,659	10,659	1.02	0.12	—	10,721
Water	—	—	—	—	—	—	—	—	—	—	—	612	1,820	2,432	62.9	1.51	—	4,456
Waste	—	—	—	—	—	—	—	—	—	—	—	722	0.00	722	72.2	0.00	—	2,527
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	224	224
Stationary	0.25	0.22	0.63	0.57	< 0.005	0.03	0.00	0.03	0.03	0.00	0.03	0.00	115	115	< 0.005	< 0.005	0.00	115
Total	46.2	44.8	69.2	114	0.79	1.49	39.2	40.7	1.41	10.2	11.6	1,334	94,485	95,819	137	11.3	319	102,916
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.64	1.46	12.5	15.2	0.14	0.26	7.16	7.42	0.24	1.87	2.11	—	13,538	13,538	0.13	1.59	15.8	14,031
Area	6.75	6.68	0.05	5.41	< 0.005	0.01	—	0.01	0.01	—	0.01	—	20.2	20.2	< 0.005	< 0.005	—	20.2
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	1,765	1,765	0.17	0.02	—	1,775
Water	—	—	—	—	—	—	—	—	—	—	—	101	301	403	10.4	0.25	—	738
Waste	—	—	—	—	—	—	—	—	—	—	—	120	0.00	120	11.9	0.00	—	418
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	37.1	37.1

Stationa	0.05	0.04	0.11	0.10	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	19.0	19.0	< 0.005	< 0.005	0.00	19.1
Total	8.43	8.18	12.6	20.7	0.14	0.27	7.16	7.43	0.26	1.87	2.12	221	15,643	15,864	22.7	1.86	52.9	17,039

3. Construction Emissions Details

3.1. Demolition (2026) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.82	1.02	< 0.005	0.02	—	0.02	0.02	—	0.02	—	142	142	0.01	< 0.005	—	142
Demolition	—	—	—	—	—	—	0.22	0.22	—	0.03	0.03	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.94	1.94	< 0.005	< 0.005	—	1.95
Demolition	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.32	0.32	< 0.005	< 0.005	—	0.32
Demoliti on	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.13	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	31.6	31.6	< 0.005	< 0.005	< 0.005	32.0
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	62.5	62.5	< 0.005	0.01	< 0.005	65.1
Hauling	< 0.005	< 0.005	0.19	0.04	< 0.005	< 0.005	0.04	0.05	< 0.005	0.01	0.01	—	160	160	< 0.005	0.03	0.01	168
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.45	0.45	< 0.005	< 0.005	< 0.005	0.45
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.86	0.86	< 0.005	< 0.005	< 0.005	0.89
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.20	2.20	< 0.005	< 0.005	< 0.005	2.30
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.07	0.07	< 0.005	< 0.005	< 0.005	0.07
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.14	0.14	< 0.005	< 0.005	< 0.005	0.15
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.36	0.36	< 0.005	< 0.005	< 0.005	0.38

3.3. Site Preparation (2026) - Unmitigated

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

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.15	2.65	23.9	21.5	0.04	1.23	—	1.23	1.13	—	1.13	—	3,804	3,804	0.15	0.03	—	3,817
Dust From Material Movement	—	—	—	—	—	—	3.82	3.82	—	1.80	1.80	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.12	1.12	1.01	< 0.005	0.06	—	0.06	0.05	—	0.05	—	179	179	0.01	< 0.005	—	179
Dust From Material Movement	—	—	—	—	—	—	0.18	0.18	—	0.08	0.08	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.20	0.18	< 0.005	0.01	—	0.01	0.01	—	0.01	—	29.6	29.6	< 0.005	< 0.005	—	29.7
Dust From Material Movement	—	—	—	—	—	—	0.03	0.03	—	0.02	0.02	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.06	0.64	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	158	158	< 0.005	0.01	0.02	160
Vendor	0.01	0.01	0.40	0.16	< 0.005	0.01	0.10	0.11	0.01	0.03	0.03	—	375	375	< 0.005	0.05	0.02	391
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	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	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.65	7.65	< 0.005	< 0.005	0.01	7.75
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	17.6	17.6	< 0.005	< 0.005	0.02	18.3
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.27	1.27	< 0.005	< 0.005	< 0.005	1.28
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.92	2.92	< 0.005	< 0.005	< 0.005	3.04
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Site Preparation (2027) - Unmitigated

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

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

Off-Roa Equipment	2.99	2.51	22.6	21.1	0.04	1.13	—	1.13	1.04	—	1.04	—	3,805	3,805	0.15	0.03	—	3,818
Dust From Material Movement	—	—	—	—	—	—	3.82	3.82	—	1.80	1.80	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.08	0.06	0.57	0.54	< 0.005	0.03	—	0.03	0.03	—	0.03	—	96.8	96.8	< 0.005	< 0.005	—	97.1
Dust From Material Movement	—	—	—	—	—	—	0.10	0.10	—	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.01	0.01	0.10	0.10	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	16.0	16.0	< 0.005	< 0.005	—	16.1
Dust From Material Movement	—	—	—	—	—	—	0.02	0.02	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.05	0.60	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	156	156	< 0.005	0.01	0.01	157
Vendor	0.01	0.01	0.38	0.16	< 0.005	0.01	0.10	0.11	0.01	0.03	0.03	—	367	367	< 0.005	0.05	0.02	382
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	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	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.07	4.07	< 0.005	< 0.005	0.01	4.13
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	9.33	9.33	< 0.005	< 0.005	0.01	9.71
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	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	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.67	0.67	< 0.005	< 0.005	< 0.005	0.68
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.54	1.54	< 0.005	< 0.005	< 0.005	1.61
Hauling	0.00	0.00	0.00	0.00	0.00	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. Grading (2027) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	8.72	7.33	62.8	62.1	0.15	2.78	—	2.78	2.56	—	2.56	—	16,443	16,443	0.67	0.13	—	16,500

Dust From Material Movement	—	—	—	—	—	—	5.75	5.75	—	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.08	0.90	7.75	7.65	0.02	0.34	—	0.34	0.32	—	0.32	—	2,027	2,027	0.08	0.02	—	2,034
Dust From Material Movement	—	—	—	—	—	—	0.71	0.71	—	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	0.20	0.16	1.41	1.40	< 0.005	0.06	—	0.06	0.06	—	0.06	—	336	336	0.01	< 0.005	—	337
Dust From Material Movement	—	—	—	—	—	—	0.13	0.13	—	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.16	0.14	0.15	1.68	0.00	0.00	0.46	0.46	0.00	0.11	0.11	—	436	436	0.01	0.02	0.04	441

Vendor	0.02	0.02	0.64	0.26	< 0.005	0.01	0.17	0.18	0.01	0.05	0.06	—	612	612	< 0.005	0.08	0.04	636
Hauling	0.02	0.02	1.08	0.24	0.01	0.02	0.25	0.27	0.02	0.07	0.08	—	917	917	< 0.005	0.15	0.05	961
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.23	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	55.3	55.3	< 0.005	< 0.005	0.08	56.0
Vendor	< 0.005	< 0.005	0.08	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	75.4	75.4	< 0.005	0.01	0.07	78.4
Hauling	< 0.005	< 0.005	0.13	0.03	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	113	113	< 0.005	0.02	0.10	118
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.15	9.15	< 0.005	< 0.005	0.01	9.27
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	12.5	12.5	< 0.005	< 0.005	0.01	13.0
Hauling	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	18.7	18.7	< 0.005	< 0.005	0.02	19.6

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	2.03	1.70	15.5	22.1	0.04	0.54	—	0.54	0.49	—	0.49	—	3,827	3,827	0.16	0.03	—	3,840
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.03	1.70	15.5	22.1	0.04	0.54	—	0.54	0.49	—	0.49	—	3,827	3,827	0.16	0.03	—	3,840

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	1.15	0.96	8.74	12.5	0.02	0.30	—	0.30	0.28	—	0.28	—	2,164	2,164	0.09	0.02	—	2,172
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.21	0.17	1.59	2.28	< 0.005	0.06	—	0.06	0.05	—	0.05	—	358	358	0.01	< 0.005	—	360
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.91	2.63	2.29	41.4	0.00	0.00	7.58	7.58	0.00	1.78	1.78	—	8,153	8,153	0.09	0.28	25.4	8,262
Vendor	0.23	0.17	5.13	2.14	0.04	0.08	1.45	1.53	0.08	0.40	0.48	—	5,193	5,193	0.01	0.68	12.0	5,409
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.65	2.37	2.55	27.8	0.00	0.00	7.58	7.58	0.00	1.78	1.78	—	7,221	7,221	0.12	0.29	0.66	7,310
Vendor	0.20	0.15	5.41	2.22	0.04	0.08	1.45	1.53	0.08	0.40	0.48	—	5,199	5,199	0.01	0.69	0.31	5,405
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.50	1.34	1.58	17.6	0.00	0.00	4.25	4.25	0.00	1.00	1.00	—	4,204	4,204	0.07	0.16	6.20	4,260
Vendor	0.12	0.09	3.06	1.24	0.02	0.04	0.82	0.86	0.04	0.23	0.27	—	2,939	2,939	0.01	0.39	2.92	3,057

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.27	0.24	0.29	3.21	0.00	0.00	0.78	0.78	0.00	0.18	0.18	—	696	696	0.01	0.03	1.03	705
Vendor	0.02	0.02	0.56	0.23	< 0.005	0.01	0.15	0.16	0.01	0.04	0.05	—	487	487	< 0.005	0.06	0.48	506
Hauling	0.00	0.00	0.00	0.00	0.00	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	1.95	1.63	14.8	22.1	0.04	0.48	—	0.48	0.44	—	0.44	—	3,827	3,827	0.16	0.03	—	3,840
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.95	1.63	14.8	22.1	0.04	0.48	—	0.48	0.44	—	0.44	—	3,827	3,827	0.16	0.03	—	3,840
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	0.98	0.82	7.43	11.1	0.02	0.24	—	0.24	0.22	—	0.22	—	1,925	1,925	0.08	0.02	—	1,931

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.18	0.15	1.36	2.03	< 0.005	0.04	—	0.04	0.04	—	0.04	—	319	319	0.01	< 0.005	—	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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.82	2.55	2.03	38.5	0.00	0.00	7.58	7.58	0.00	1.78	1.78	—	7,998	7,998	0.09	0.28	22.8	8,105
Vendor	0.22	0.16	4.96	2.04	0.04	0.08	1.45	1.53	0.08	0.40	0.48	—	5,059	5,059	0.01	0.68	10.6	5,274
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.32	2.26	2.29	25.8	0.00	0.00	7.58	7.58	0.00	1.78	1.78	—	7,085	7,085	0.10	0.28	0.59	7,170
Vendor	0.20	0.15	5.24	2.08	0.04	0.08	1.45	1.53	0.08	0.40	0.48	—	5,065	5,065	0.01	0.68	0.27	5,269
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.18	1.15	1.28	14.5	0.00	0.00	3.78	3.78	0.00	0.89	0.89	—	3,668	3,668	0.05	0.14	4.97	3,715
Vendor	0.11	0.08	2.62	1.03	0.02	0.04	0.73	0.77	0.04	0.20	0.24	—	2,546	2,546	0.01	0.34	2.30	2,651
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.21	0.21	0.23	2.65	0.00	0.00	0.69	0.69	0.00	0.16	0.16	—	607	607	0.01	0.02	0.82	615
Vendor	0.02	0.01	0.48	0.19	< 0.005	0.01	0.13	0.14	0.01	0.04	0.04	—	421	421	< 0.005	0.06	0.38	439
Hauling	0.00	0.00	0.00	0.00	0.00	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. 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	1.22	1.03	9.94	14.9	0.02	0.38	—	0.38	0.35	—	0.35	—	2,267	2,267	0.09	0.02	—	2,274
Paving	3.20	3.20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.22	1.03	9.94	14.9	0.02	0.38	—	0.38	0.35	—	0.35	—	2,267	2,267	0.09	0.02	—	2,274
Paving	3.20	3.20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	0.14	1.36	2.04	< 0.005	0.05	—	0.05	0.05	—	0.05	—	310	310	0.01	< 0.005	—	312
Paving	0.44	0.44	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.03	0.03	0.25	0.37	< 0.005	0.01	—	0.01	0.01	—	0.01	—	51.4	51.4	< 0.005	< 0.005	—	51.6
Paving	0.08	0.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.10	0.08	1.49	0.00	0.00	0.29	0.29	0.00	0.07	0.07	—	310	310	< 0.005	0.01	0.89	314
Vendor	0.01	0.01	0.32	0.13	< 0.005	< 0.005	0.09	0.10	< 0.005	0.03	0.03	—	327	327	< 0.005	0.04	0.69	341
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.09	0.09	1.00	0.00	0.00	0.29	0.29	0.00	0.07	0.07	—	275	275	< 0.005	0.01	0.02	278
Vendor	0.01	0.01	0.34	0.13	< 0.005	< 0.005	0.09	0.10	< 0.005	0.03	0.03	—	328	328	< 0.005	0.04	0.02	341
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	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	0.15	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	38.7	38.7	< 0.005	< 0.005	0.05	39.2
Vendor	< 0.005	< 0.005	0.05	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	44.9	44.9	< 0.005	0.01	0.04	46.7
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.41	6.41	< 0.005	< 0.005	0.01	6.50
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.43	7.43	< 0.005	< 0.005	0.01	7.73
Hauling	0.00	0.00	0.00	0.00	0.00	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. 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	0.35	0.29	2.16	2.98	< 0.005	0.04	—	0.04	0.04	—	0.04	—	356	356	0.01	< 0.005	—	357
Architectural Coatings	143	143	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.35	0.29	2.16	2.98	< 0.005	0.04	—	0.04	0.04	—	0.04	—	356	356	0.01	< 0.005	—	357
Architectural Coatings	143	143	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.30	0.41	< 0.005	0.01	—	0.01	0.01	—	0.01	—	48.8	48.8	< 0.005	< 0.005	—	48.9
Architectural Coatings	19.6	19.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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	0.01	0.01	0.05	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.07	8.07	< 0.005	< 0.005	—	8.10
Architectural Coatings	3.57	3.57	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.56	0.51	0.41	7.70	0.00	0.00	1.52	1.52	0.00	0.36	0.36	—	1,600	1,600	0.02	0.06	4.57	1,621
Vendor	0.01	0.01	0.32	0.13	< 0.005	< 0.005	0.09	0.10	< 0.005	0.03	0.03	—	327	327	< 0.005	0.04	0.69	341
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.46	0.45	0.46	5.16	0.00	0.00	1.52	1.52	0.00	0.36	0.36	—	1,417	1,417	0.02	0.06	0.12	1,434
Vendor	0.01	0.01	0.34	0.13	< 0.005	< 0.005	0.09	0.10	< 0.005	0.03	0.03	—	328	328	< 0.005	0.04	0.02	341
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.07	0.79	0.00	0.00	0.21	0.21	0.00	0.05	0.05	—	200	200	< 0.005	0.01	0.27	202
Vendor	< 0.005	< 0.005	0.05	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	44.9	44.9	< 0.005	0.01	0.04	46.7
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.14	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	33.1	33.1	< 0.005	< 0.005	0.04	33.5

Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.43	7.43	< 0.005	< 0.005	0.01	7.73
Hauling	0.00	0.00	0.00	0.00	0.00	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

4.1. 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	0.15	0.13	5.26	1.30	0.06	0.12	1.94	2.06	0.11	0.52	0.63	—	5,945	5,945	0.01	0.84	14.9	6,209
Refrigerated Warehouse-Rail	0.88	0.74	24.1	8.26	0.23	0.53	9.00	9.52	0.50	2.41	2.91	—	24,409	24,409	0.07	3.38	74.3	25,491
Unrefrigerated Warehouse-No Rail	1.50	1.24	52.6	12.8	0.56	1.18	19.2	20.4	1.13	5.13	6.26	—	58,867	58,867	0.13	8.32	147	61,496
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	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
User Defined Industrial	10.5	9.64	5.29	112	0.24	0.09	23.9	24.0	0.09	6.02	6.11	—	24,658	24,658	0.81	0.55	65.4	24,909
Total	13.1	11.7	87.3	135	1.09	1.92	54.1	56.0	1.83	14.1	15.9	—	113,879	113,879	1.01	13.1	301	118,104

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.15	0.12	5.54	1.29	0.06	0.12	1.94	2.06	0.11	0.52	0.63	—	5,946	5,946	0.01	0.84	0.39	6,196
Refrigerated Warehouse-Rail	0.86	0.72	25.4	8.19	0.23	0.53	9.00	9.52	0.50	2.41	2.91	—	24,414	24,414	0.06	3.38	1.93	25,425
Unrefrigerated Warehouse-No Rail	1.45	1.20	55.3	12.8	0.56	1.18	19.2	20.4	1.13	5.13	6.26	—	58,881	58,881	0.12	8.33	3.81	61,370
Parking Lot	0.00	0.00	0.00	0.00	0.00	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
User Defined Industrial	9.72	8.83	5.87	84.4	0.22	0.09	23.9	24.0	0.09	6.02	6.11	—	21,978	21,978	0.84	0.59	1.70	22,177
Total	12.2	10.9	92.1	107	1.07	1.92	54.1	56.0	1.83	14.1	15.9	—	111,220	111,220	1.04	13.1	7.82	115,169
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.02	0.02	0.75	0.17	0.01	0.02	0.26	0.27	0.02	0.07	0.08	—	720	720	< 0.005	0.10	0.78	751
Refrigerated Warehouse-Rail	0.12	0.10	3.43	1.09	0.03	0.07	1.19	1.26	0.07	0.32	0.39	—	2,955	2,955	0.01	0.41	3.89	3,081
Unrefrigerated Warehouse-No Rail	0.20	0.16	7.47	1.69	0.07	0.16	2.55	2.71	0.15	0.68	0.83	—	7,128	7,128	0.02	1.01	7.67	7,437

Parking Lot	0.00	0.00	0.00	0.00	0.00	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
User Defined Industrial	1.30	1.18	0.82	12.3	0.03	0.01	3.16	3.18	0.01	0.80	0.81	—	2,735	2,735	0.10	0.07	3.42	2,763
Total	1.64	1.46	12.5	15.2	0.14	0.26	7.16	7.42	0.24	1.87	2.11	—	13,538	13,538	0.13	1.59	15.8	14,031

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	1,250	1,250	0.12	0.01	—	1,257
Refrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	—	4,303	4,303	0.41	0.05	—	4,328
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	4,539	4,539	0.43	0.05	—	4,565
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	568	568	0.05	0.01	—	571
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	10,659	10,659	1.02	0.12	—	10,721
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	1,250	1,250	0.12	0.01	—	1,257
Refrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	—	4,303	4,303	0.41	0.05	—	4,328
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	4,539	4,539	0.43	0.05	—	4,565
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	568	568	0.05	0.01	—	571
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	10,659	10,659	1.02	0.12	—	10,721
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	207	207	0.02	< 0.005	—	208
Refrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	—	712	712	0.07	0.01	—	717

Unrefrigerated	—	—	—	—	—	—	—	—	—	—	—	—	751	751	0.07	0.01	—	756
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	94.0	94.0	0.01	< 0.005	—	94.5
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,765	1,765	0.17	0.02	—	1,775

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
Refrigerated Warehouse-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

User Defined Industrial	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Refrigerated Warehouse-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
User Defined Industrial	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Refrigerated Warehouse-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	0.00	0.00	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
User Defined Industrial	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.3. Area Emissions by Source

4.3.1. Unmitigated

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

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	29.8	29.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	1.96	1.96	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	10.7	9.87	0.51	60.1	< 0.005	0.11	—	0.11	0.08	—	0.08	—	247	247	0.01	< 0.005	—	248
Total	42.4	41.6	0.51	60.1	< 0.005	0.11	—	0.11	0.08	—	0.08	—	247	247	0.01	< 0.005	—	248

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	29.8	29.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	1.96	1.96	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	31.7	31.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	5.43	5.43	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.36	0.36	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.96	0.89	0.05	5.41	< 0.005	0.01	—	0.01	0.01	—	0.01	—	20.2	20.2	< 0.005	< 0.005	—	20.2
Total	6.75	6.68	0.05	5.41	< 0.005	0.01	—	0.01	0.01	—	0.01	—	20.2	20.2	< 0.005	< 0.005	—	20.2

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

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

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

General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	61.2	182	243	6.29	0.15	—	446
Refrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	91.8	273	365	9.44	0.23	—	668
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	459	1,365	1,824	47.2	1.13	—	3,342
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
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	612	1,820	2,432	62.9	1.51	—	4,456
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	61.2	182	243	6.29	0.15	—	446
Refrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	91.8	273	365	9.44	0.23	—	668
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	459	1,365	1,824	47.2	1.13	—	3,342
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
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	612	1,820	2,432	62.9	1.51	—	4,456
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	10.1	30.1	40.3	1.04	0.03	—	73.8
Refrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	15.2	45.2	60.4	1.56	0.04	—	111
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	76.0	226	302	7.82	0.19	—	553
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
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	101	301	403	10.4	0.25	—	738

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	—	—	—	—	—	—	—	—	—	—	—	92.3	0.00	92.3	9.23	0.00	—	323
Refrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	105	0.00	105	10.5	0.00	—	367
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	525	0.00	525	52.5	0.00	—	1,836
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
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	722	0.00	722	72.2	0.00	—	2,527
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	92.3	0.00	92.3	9.23	0.00	—	323
Refrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	105	0.00	105	10.5	0.00	—	367

Unrefrigerated Wareho Rail	—	—	—	—	—	—	—	—	—	—	—	525	0.00	525	52.5	0.00	—	1,836
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
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	722	0.00	722	72.2	0.00	—	2,527
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	15.3	0.00	15.3	1.53	0.00	—	53.5
Refrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	17.4	0.00	17.4	1.74	0.00	—	60.8
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	86.9	0.00	86.9	8.69	0.00	—	304
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
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	120	0.00	120	11.9	0.00	—	418

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	211	211
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	12.9	12.9
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	224	224
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	211	211
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	12.9	12.9
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	224	224
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	35.0	35.0
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.14	2.14

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	37.1	37.1

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

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

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

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

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

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Fire Pump	0.54	0.49	1.38	1.26	< 0.005	0.07	0.00	0.07	0.07	0.00	0.07	0.00	252	252	0.01	< 0.005	0.00	253

Emergency	1.26	1.15	3.21	2.93	0.01	0.17	0.00	0.17	0.17	0.00	0.17	0.00	588	588	0.02	< 0.005	0.00	590
Total	1.80	1.64	4.59	4.18	0.01	0.24	0.00	0.24	0.24	0.00	0.24	0.00	840	840	0.03	0.01	0.00	842
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Fire Pump	0.54	0.49	1.38	1.26	< 0.005	0.07	0.00	0.07	0.07	0.00	0.07	0.00	252	252	0.01	< 0.005	0.00	253
Emergency Generator	1.26	1.15	3.21	2.93	0.01	0.17	0.00	0.17	0.17	0.00	0.17	0.00	588	588	0.02	< 0.005	0.00	590
Total	1.80	1.64	4.59	4.18	0.01	0.24	0.00	0.24	0.24	0.00	0.24	0.00	840	840	0.03	0.01	0.00	842
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Fire Pump	0.01	0.01	0.03	0.03	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	5.71	5.71	< 0.005	< 0.005	0.00	5.73
Emergency Generator	0.03	0.03	0.08	0.07	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	13.3	13.3	< 0.005	< 0.005	0.00	13.4
Total	0.05	0.04	0.11	0.10	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	19.0	19.0	< 0.005	< 0.005	0.00	19.1

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

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

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

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

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

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

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

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

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

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

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

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

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

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

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	12/1/2026	12/7/2026	5.00	5.00	—
Site Preparation	Site Preparation	12/8/2026	1/13/2027	5.00	27.0	—
Grading	Grading	1/14/2027	3/17/2027	5.00	45.0	—
Building Construction	Building Construction	3/18/2027	9/13/2028	5.00	390	—
Paving	Paving	9/14/2028	11/22/2028	5.00	50.0	—
Architectural Coating	Architectural Coating	9/14/2028	11/22/2028	5.00	50.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

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

Demolition	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Site Preparation	Rubber Tired Dozers	Diesel	Average	2.00	8.00	367	0.40
Site Preparation	Crawler Tractors	Diesel	Average	3.00	8.00	87.0	0.43
Grading	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Grading	Graders	Diesel	Average	2.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	2.00	8.00	367	0.40
Grading	Scrapers	Diesel	Average	6.00	8.00	423	0.48
Grading	Crawler Tractors	Diesel	Average	3.00	8.00	87.0	0.43
Building Construction	Cranes	Diesel	Average	1.00	8.00	367	0.29
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	Tractors/Loaders/Backhoes	Diesel	Average	5.00	8.00	84.0	0.37
Building Construction	Welders	Diesel	Average	2.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Average	3.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	3.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	3.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	2.00	8.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	2.50	18.5	LDA,LDT1,LDT2
Demolition	Vendor	2.00	10.2	HHDT,MHDT
Demolition	Hauling	2.40	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—

Site Preparation	Worker	12.5	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	12.0	10.2	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	35.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	20.0	10.2	HHDT,MHDT
Grading	Hauling	14.0	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	580	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	170	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	22.5	18.5	LDA,LDT1,LDT2
Paving	Vendor	11.0	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	116	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	11.0	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

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	2,072,118	690,706	159,456

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (Building Square Footage)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	1,040	—
Site Preparation	—	—	67.5	0.00	—
Grading	5,056	—	428	0.00	—
Paving	0.00	0.00	0.00	0.00	61.0

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-Rail	0.00	0%
Unrefrigerated Warehouse-No Rail	0.00	0%
Parking Lot	15.7	100%
Other Asphalt Surfaces	45.3	100%
User Defined Industrial	0.00	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2026	0.00	346	0.03	< 0.005
2027	0.00	346	0.03	< 0.005
2028	0.00	346	0.03	< 0.005

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	36.1	3.04	1.24	9,623	2,239	189	77.2	597,607
Refrigerated Warehouse-Rail	166	14.1	5.59	44,299	10,307	875	347	2,750,966
Unrefrigerated Warehouse-No Rail	356	30.0	12.4	95,135	22,133	1,866	772	5,907,861
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
User Defined Industrial	2,241	189	76.0	597,999	34,506	2,915	1,170	9,209,191

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	2,072,118	690,706	159,456

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	1,317,551	346	0.0330	0.0040	0.00
Refrigerated Warehouse-Rail	4,536,998	346	0.0330	0.0040	0.00
Unrefrigerated Warehouse-No Rail	4,785,249	346	0.0330	0.0040	0.00
Parking Lot	598,326	346	0.0330	0.0040	0.00
Other Asphalt Surfaces	0.00	346	0.0330	0.0040	0.00
User Defined Industrial	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	31,945,106	1,869,024
Refrigerated Warehouse-Rail	47,917,775	2,803,558
Unrefrigerated Warehouse-No Rail	239,588,644	14,017,789

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

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
General Heavy Industry	171	—
Refrigerated Warehouse-Rail	195	—
Unrefrigerated Warehouse-No Rail	974	—
Parking Lot	0.00	—
Other Asphalt Surfaces	0.00	—
User Defined Industrial	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Refrigerated Warehouse-Rail	Cold storage	User Defined	150	7.50	7.50	7.50	25.0
General Heavy Industry	Other commercial A/C and heat pumps	User Defined	750	0.30	4.00	4.00	18.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

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

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
Fire Pump	Diesel	1.00	1.00	50.0	300	0.73
Emergency Generator	Diesel	1.00	1.00	50.0	700	0.73

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	34.1	annual days of extreme heat
Extreme Precipitation	0.90	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.80	annual hectares burned

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

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	5	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A

Flooding	N/A	N/A	N/A	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

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

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	5	1	1	4
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

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

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

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

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	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
Construction: Construction Phases	Based on 2028 OY and provided construction start and end dates. (end of 2026 and 2028, respectivley)
Land Use	Taken from site plan
Construction: Off-Road Equipment	Project applicant provided equipment list as well as CalEEMod defaults.
Construction: Trips and VMT	"CalEEMod only assumes Vendor Trips during Building Construction. The CalEEMod default trips were ratioed between each phase based on the number of days."
Operations: Energy Use	Natural gas will not be utilized
Operations: Vehicle Data	Trip information taken from Traffic Analysis.
Operations: Fleet Mix	Passenger Car Mix estimated based on CalEEMod default fleet mix and the ratio of the vehicle classes (LDA, LDT1, LDT2, MDV, MCY). Truck Fleet Mix based on 2, 3 and 4 axle trucks
Operations: Refrigerants	As of 1 January 2022, new commercial refrigeration equipment may not use refrigerants with a GWP of 150 or greater. Beginning 1 January 2025, all new air conditioning equipment may not use refrigerants with a GWP of 750 or greater
Construction: Architectural Coatings	—

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APPENDIX 4.2:

EMFAC2021

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	:ndar	Vhicle Catego	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 Hybrid	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 Hybrid	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 Hybrid	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 Hybrid	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	:ndar	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 Hybrid	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 Hybrid	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 Hybrid	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 Hybrid	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	:ndar	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)	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 Hybrid	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 Hybrid	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 Hybrid	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 Hybrid	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			

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