



**First March Logistics
(DPR20-00004)
ENERGY ANALYSIS
CITY OF PERRIS**

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LIST OF ABBREVIATED TERMS

%	Percent
(1)	Reference
AGSP	Airport Gateway Specific Plan
AQIA	<i>First March Logistics Air Quality Impact Analysis</i>
BACM	Best Available Control Measures
BTU	British Thermal Units
CalEEMod	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
City	City of Perris
CPEP	Clean Power and Electrification Pathway
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
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
MARB/IPA	March Air Reserve Base/Inland Port Airport
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	First March Logistics
PV	Photovoltaic
PVCCSP	Perris Valley Commerce Center Specific Plan
PVCCSP EIR	<i>Perris Valley Commerce Center Specific Plan Environmental Impact Report SCH No. 2009081086</i>
SCAB	South Coast Air Basin
SCE	Southern California Edison
SDAB	San Diego Air Basin
sf	Square Feet
SoCalGas	Southern California Gas
TEA-21	Transportation Equity Act for the 21 st Century
TRUs	Transportation Refrigeration Units
U.S.	United States
VMT	Vehicle Miles Traveled

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EXECUTIVE SUMMARY

ES.1 SUMMARY OF FINDINGS

The results of this *First March Logistics Energy Analysis* is summarized below based on the significance criteria in Section 5 of this report consistent with Appendix G of the Guidelines for Implementation of the California Environmental Quality Act (*CEQA Guidelines*) (1). Table ES-1 shows the findings of significance for potential energy impacts under CEQA.

TABLE ES-1: SUMMARY OF CEQA SIGNIFICANCE FINDINGS

Analysis	Report Section	Significance Findings	
		Unmitigated	Mitigated
Energy Impact #1: 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	<i>Less Than Significant</i>	<i>n/a</i>
Energy Impact #2: Would the Project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	5.0	<i>Less Than Significant</i>	<i>n/a</i>

ES.2 REGULATORY 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)
- Clean Energy and Pollution Reduction Act of 2015 (SB 350)

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

ES.3 PERRIS VALLEY COMMERCE CENTER SPECIFIC PLAN (PVCCSP) ENVIRONMENTAL IMPACT REPORT (PVCCSP EIR) MITIGATION MEASURES

The Project site is located within the PVCCSP planning area of the City of Perris. As such, the Project is required to comply with the applicable *Perris Valley Commerce Center Specific Plan Environmental Impact Report SCH No. 2009081086* mitigation measures (MMs) (2).

The applicable PVCCSP EIR mitigation measures for air quality are shown below and are required for the Project, these select measures would also assist in the reduction of energy usage. As a conservative measure, to provide a worst-case disclosure of the Project's impacts, no credit has been assumed from the following measures, yet, per above, the project will be required to comply with them.

MM Air 19

In order to reduce energy consumption from the individual implementing development projects, applicable plans (e.g., electrical plans, improvement maps) submitted to the City shall include the installation of energy-efficient street lighting throughout the project sites. These plans shall be reviewed and approved by the applicable City Department (e.g., City of Perris' Building Division) prior to conveyance of applicable streets.

MM Air 20

Each implementing development project shall be encouraged to implement, at a minimum, an increase in each building's energy efficiency 15 percent (%) beyond Title 24, and reduce indoor water use by 25%. All reductions would be documented through a checklist to be submitted prior to issuance of building permits for the implementing development project with building plans and calculations.

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1 INTRODUCTION

This report presents the results of the energy analysis prepared by Urban Crossroads, Inc., for the proposed First March Logistics Project (Project). The purpose of this report is to ensure that energy implication is considered by the City of Perris (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 proposed First March Logistics site is located north of Nandina Avenue and west of Natwar Lane, within the City of Perris' *Perris Valley Commerce Center Specific Plan* (PVCCSP) planning area of the City of Perris as shown on Exhibit 1-A. March Air Reserve Base/Inland Port Airport (MARB/IPA) is located approximately 0.23 mile east of the Project site boundary.

The Project site is located adjacent to existing industrial and commercial land uses. The nearest residential home is located approximately 1,613 feet to the southeast of the Project site. According to the PVCCSP, the western portion of the Project site is designated for Light Industrial uses and the eastern portion of the Project site is designated for General Industrial uses. The Light Industrial designation provides for light industrial uses and related activities including manufacturing, research, warehouse and distribution, assembly of non-hazardous materials and retail related to manufacturing. The General Industrial designation provides for the development of basic industrial uses which may support a wide range of manufacturing and non-manufacturing uses, from large-scale warehouse and warehouse/distribution facilities to outdoor industrial activities (2).

1.2 PROJECT DESCRIPTION

The Project is proposed to consist of a single 419,034-square-foot (sf) warehouse building (Building 1) and a second 139,971-sf warehouse building (Building 2), as shown on Exhibit 1-B¹. Building 1 (Phase 1) is anticipated to be constructed by the year 2023 while Project Buildout (Phase 2) is anticipated by year 2025. The proposed Project land use is consistent with the PVCCSP Light Industrial and General Industrial land use designations.

The buildings would allow for either high-cube, non-refrigerated or high-cube cold warehouse/distribution, or manufacturing uses. This analysis is intended to describe energy usage associated with the expected operational activities at the Project site. This report assumes the Project will operate 24-hours daily for seven days per week.

¹ At the time the underlying modeling was conducted for this report, the site plan included a slightly larger total square footage, including a 419,034-sf warehouse building (Building 1) and a second 139,971-sf warehouse building (Building 2). The emissions calculations are based on the trip generation which is also based on the slightly larger building square footages. As such, the emissions analyzed in this report may be slightly overstated and represent a conservative estimate for analytical purposes.

EXHIBIT 1-A: LOCATION MAP

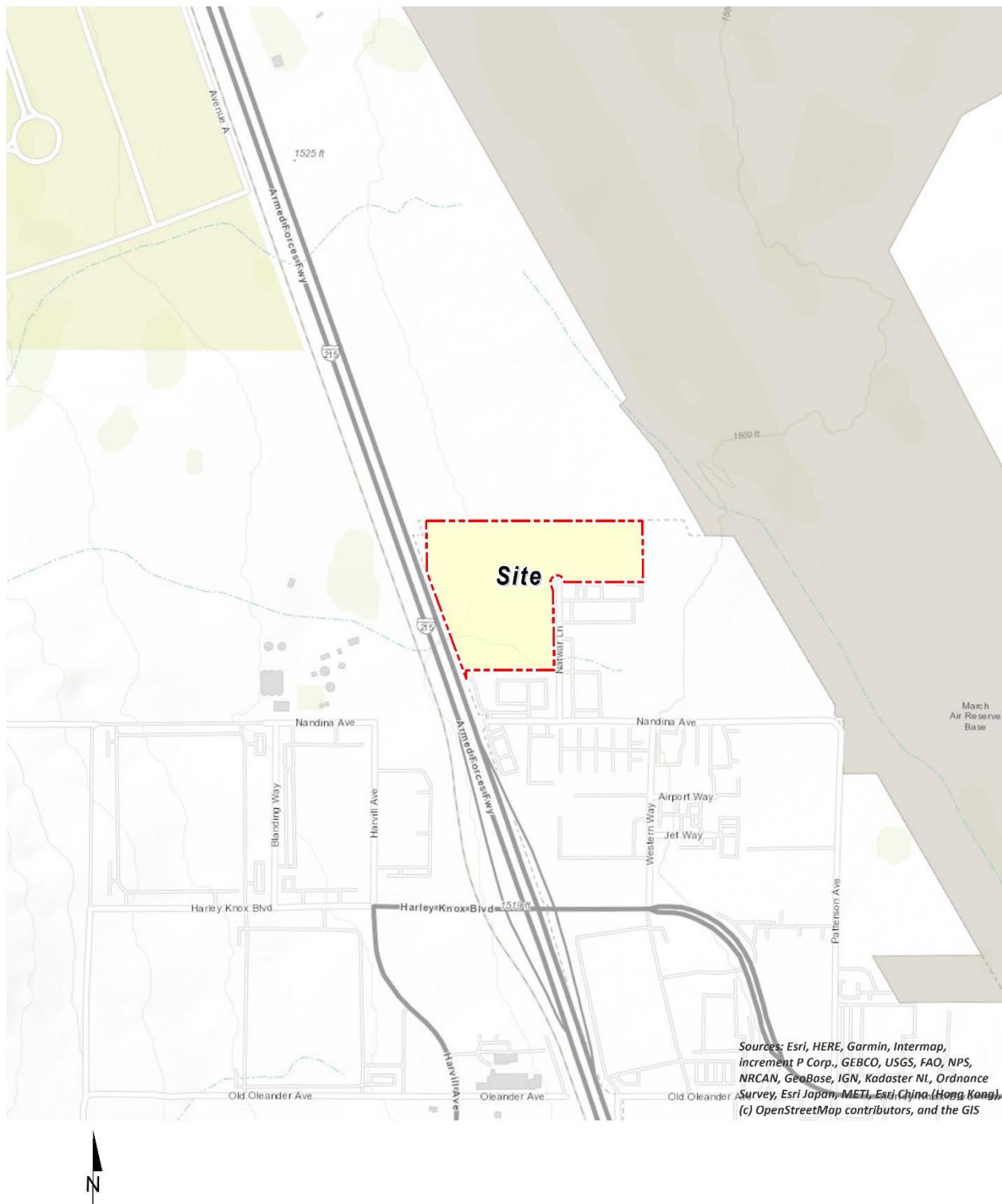
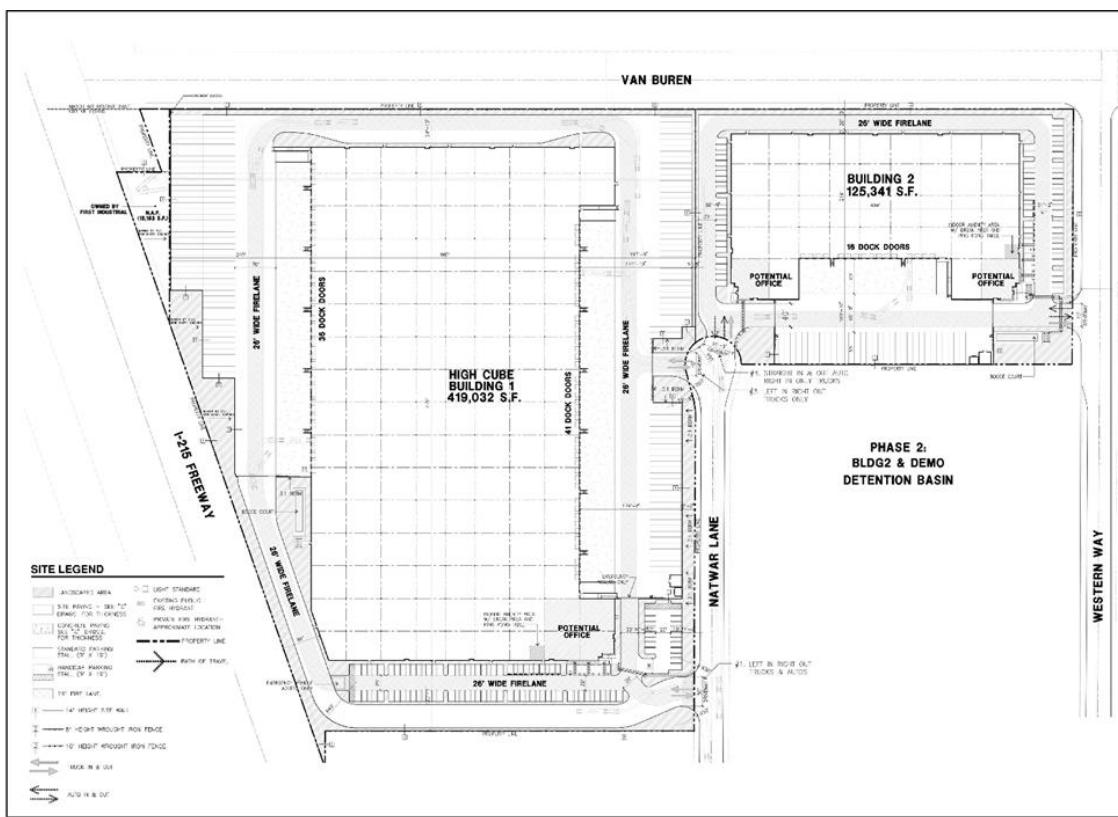


EXHIBIT 1-B: SITE PLAN



Scale: 100'

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2 EXISTING CONDITIONS

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

2.1 OVERVIEW

The most recent data for California's estimated total energy consumption and natural gas consumption is from 2019, released by the United States (U.S.) Energy Information Administration's (EIA) California State Profile and Energy Estimates in 2021 and included (3):

- As of 2019, approximately 7,802 trillion British Thermal Unit (BTU) of energy was consumed
- As of 2019, approximately 662 million barrels of petroleum
- As of 2019, approximately 2,144 billion cubic feet of natural gas
- As of 2019, approximately 1 million short tons of coal

The California Energy Commission's (CEC) Transportation Energy Demand Forecast 2018-2030 was released in order to support the 2017 Integrated Energy Policy Report. The Transportation energy Demand Forecast 2018-2030 lays out graphs and data supporting their projections of California's future transportation energy demand. The projected inputs consider expected variable changes in fuel prices, income, population, and other variables. Predictions regarding fuel demand included:

- Gasoline demand in the transportation sector is expected to decline from approximately 15.8 billion gallons in 2017 to between 12.3 billion and 12.7 billion gallons in 2030 (4)
- Diesel demand in the transportation sector is expected to rise, increasing from approximately 3.7 billion diesel gallons in 2015 to approximately 4.7 billion in 2030 (4)
- Data from the Department of Energy states that approximately 3.9 billion gallons of diesel fuel were consumed in 2019 (5)

The most recent data provided by the EIA for energy use in California by demand sector is from 2018 and is reported as follows:

- Approximately 39.3% transportation
- Approximately 23.2% industrial
- Approximately 18.7% residential
- Approximately 18.9% commercial (6)

In 2020, total system electric generation for California was 272,576 gigawatt hours (GWh). California's massive electricity in-state generation system generated approximately 190,913 GWh which accounted for approximately 70% of the electricity it uses; the rest was imported from the Pacific Northwest (15%) and the U.S. Southwest (15%) (7). Natural gas is the main source for electricity generation at 48.35% of the total in-state electric generation system power as shown in Table 2-1.

TABLE 2-1: TOTAL ELECTRICITY SYSTEM POWER (CALIFORNIA 2020)

Fuel Type	California In-State Generation (GWh)	Percent of California In-State Generation	Northwest Imports (GWh)	Southwest Imports (GWh)	Total Imports (GWh)	Percent of Imports	Total California Energy Mix	Total California Power Mix
Coal	317	0.17%	194	6,963	7,157	8.76%	7,474	2.74%
Natural Gas	92,298	48.35%	70	8,654	8,724	10.68%	101,022	37.06%
Oil	30	0.02%	-	-	0	0.00%	30	0.01%
Other (Waste Heat/Petroleum Coke)	384	0.20%	125	9	134	0.16%	518	0.19%
Nuclear	16,280	8.53%	672	8,481	9,154	11.21%	25,434	9.33%
Large Hydro	17,938	9.40%	14,078	1,259	15,337	18.78%	33,275	12.21%
Unspecified	-	0.00%	12,870	1,745	14,615	17.90%	14,615	5.36%
Non-Renewable and Unspecified Totals	127,248	66.65%	28,009	27,111	55,120	67.50%	182,368	66.91%
Biomass	5,680	2.97%	975	25	1,000	1.22%	6,679	2.45%
Geothermal	11,345	5.94%	166	1,825	1,991	2.44%	13,336	4.89%
Small Hydro	3,476	1.82%	320	2	322	0.39%	3,798	1.39%
Solar	29,456	15.43%	284	6,312	6,596	8.08%	36,052	13.23%
Wind	13,708	7.18%	11,438	5,197	16,635	20.37%	30,343	11.13%
Renewable Totals	63,665	33.35%	13,184	13,359	26,543	32.50%	90,208	33.09%
System Totals	190,913	100.00%	41,193	40,471	81,663	100.00%	272,576	100.00%

Source: California Energy Commission's 2020 Total System Electric Generation

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 (8):

- California was the seventh-largest producer of crude oil among the 50 states in 2019, and, as of January 2020, it ranked third in oil refining capacity. Foreign suppliers, led by Saudi Arabia, Iraq, Ecuador, and Colombia, provided more than half of the crude oil refined in California in 2019.
- California is the largest consumer of both jet fuel and motor gasoline among the 50 states and accounted for 17% of the nation’s jet fuel consumption and 11% of motor gasoline consumption in 2019. The state is the second-largest consumer of all petroleum products combined, accounting for 10% of the U.S. total. In 2018, California’s energy consumption was the second highest among the states, but its per capita energy consumption was the fourth-lowest due in part to its mild climate and its energy efficiency programs.
- In 2019, California was the nation’s top producer of electricity from solar, geothermal, and biomass energy and the state was second in the nation in conventional hydroelectric power generation.
- In 2019, California was the fourth largest electricity producer in the nation, but the state was also the nation’s largest importer of electricity and received about 28% of its electricity supply from generating facilities outside of California, including imports from Mexico.

As indicated above, 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.

2.2 ELECTRICITY

The Southern California region’s electricity reliability has been of concern for the past several years due to the planned retirement of aging facilities that depend upon once-through cooling technologies, as well as the June 2013 retirement of the San Onofre Nuclear Generating Station (San Onofre). While the once-through cooling phase-out has been ongoing since the May 2010 adoption of the State Water Resources Control Board’s once-through cooling policy, the retirement of San Onofre complicated the situation. California Independent Service Operator (ISO) studies revealed the extent to which the South California Air Basin (SCAB) and the San Diego Air Basin (SDAB) region were vulnerable to low-voltage and post-transient voltage instability concerns. A preliminary plan to address these issues was detailed in the 2013 Integrative Energy Policy Report (IEPR) after a collaborative process with other energy agencies, utilities, and air districts (9). Similarly, the subsequent 2018 and 2019 IEPR’s identify broad strategies that are aimed at maintaining electricity system reliability.

Electricity is currently provided to the Project area 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 2018 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 (10).

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 (11).

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.

Tables 2-2 identifies SCE's specific proportional shares of electricity sources in 2019. As indicated in Table 2-2, the 2019 SCE Power Mix has renewable energy at 35.1% of the overall energy resources. Geothermal resources are at 5.9%, wind power is at 11.5%, large hydroelectric sources are at 7.9%, solar energy is at 16.0%, and coal is at 0% (12).

TABLE 2-2: SCE 2019 POWER CONTENT MIX

Energy Resources	2019 SCE Power Mix
<i>Eligible Renewable</i>	35.1%
Biomass & Waste	0.6%
Geothermal	5.9%
Eligible Hydroelectric	1.0%
Solar	16.0%
Wind	11.5%
<i>Coal</i>	0.0%
<i>Large Hydroelectric</i>	7.9%
<i>Natural Gas</i>	16.1%
<i>Nuclear</i>	8.2%
<i>Other</i>	0.1%
Unspecified Sources of power*	32.6%
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 (MMcf/d) of gas to their customers, on average, under normal weather conditions.

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

A significant amount of gas (about 19%, or 1131 MMcf/d, 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 that deliver out-of-state natural gas to California gas utilities 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 California Public Utilities Commission may participate in FERC regulatory proceedings to represent the interests of California natural gas consumers.

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

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

PG&E and SoCalGas own and operate several natural gas storage fields that are located within their service territories in northern and southern California, respectively. These storage fields, and four independently owned storage utilities - Lodi Gas Storage, Wild Goose Storage, Central Valley Storage, and Gill Ranch Storage - help meet peak seasonal and daily natural gas demand and allow California natural gas customers to secure natural gas supplies more efficiently. PG&E is a 25% owner of the Gill Ranch Storage field. These storage fields provide a significant amount of infrastructure capacity to help meet

California's natural gas requirements, and without these storage fields, California would need much more pipeline capacity in order to meet peak gas requirements .

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

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

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

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

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

certain amount of backbone transmission capacity is obtained for core customers to assure meeting their requirements.

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

In order properly operate their natural gas transmission pipeline and storage systems, PG&E and SoCalGas must balance the amount of gas received into the pipeline system and delivered to customers or to storage fields. Some of these utilities' storage capacity is dedicated to this service, and under most circumstances, customers do not need to precisely match their deliveries with their consumption. However, when too much or too little gas is expected to be delivered into the utilities' systems, relative to the amount being consumed, the utilities require customers to more precisely match up their deliveries with their consumption. And, if customers do not meet certain delivery requirements, they could face financial penalties. The utilities do not profit from these financial penalties - the amounts are then returned to customers as a whole. If the utilities find that they are unable to deliver all the gas that is expected to be consumed, they may even call for a curtailment of some gas deliveries. These curtailments are typically required for just the largest, noncore customers. It has been many years since there has been a significant curtailment of core customers in California." (13)

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. The Department of Motor Vehicles (DMV) identified 35.8 million registered vehicles in California (14), and those vehicles consume an estimated 17.4 billion gallons of fuel each year². Gasoline (and other vehicle fuels) are commercially provided commodities and would be available to the Project patrons and employees via commercial outlets.

² Fuel consumptions estimated utilizing information from EMFAC2017.

California's on-road transportation system includes 394,383 land miles, more than 26.4 million passenger vehicles and light trucks, and almost 8.8 million medium- and heavy-duty vehicles (14). While gasoline consumption has been declining since 2008 it is still by far the dominant fuel. California is the second-largest consumer of petroleum products, after Texas, and accounts for 10% of the nation's total consumption. The state is the largest U.S. consumer of motor gasoline and jet fuel, and 85% of the petroleum consumed in California is used in the transportation sector (15).

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 2019, about 37% of the natural gas delivered to consumers went to the state's industrial sector, and about 28% was delivered to the electric power sector. Natural gas fueled more than two-fifths of the state's utility-scale electricity generation in 2019. The residential sector, where two-thirds of California households use natural gas for home heating, accounted for 22% of natural gas deliveries. The commercial sector received 12% of the deliveries to end users and the transportation sector consumed the remaining 1% (15).

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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. TEA-21 authorizes highway, highway safety, transit, and other efficient surface transportation programs. TEA-21 continues the program structure established for highways and transit under ISTEA, such as flexibility in the use of funds, emphasis on measures to improve the environment, and focus on a strong planning process as the foundation of good transportation decisions. TEA-21 also provides for investment in research and its application to maximize the performance of the transportation system through, for example, deployment of Intelligent Transportation Systems, to help improve operations and management of transportation systems and vehicle safety.

3.2 CALIFORNIA REGULATIONS

3.2.1 INTEGRATED ENERGY POLICY REPORT (IEPR)

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

The 2020 IEPR was adopted March 23, 2020, and continues to work towards improving electricity, natural gas, and transportation fuel energy use in California. The 2020 IEPR identifies actions the

state and others can take to ensure a clean, affordable, and reliable energy system. California's innovative energy policies strengthen energy resiliency, reduce greenhouse gas (GHG) emissions that cause climate change, improve air quality, and contribute to a more equitable future (16).

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 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 CALIFORNIA CODE TITLE 24, PART 6, ENERGY EFFICIENCY STANDARDS

California Code of Regulations (CCR) Title 24 Part 6: California's Energy Efficiency Standards for Residential and Nonresidential Buildings, 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. Energy efficient buildings require less electricity; therefore, increased energy efficiency reduces fossil fuel consumption and decreases greenhouse gas (GHG) emissions. The 2019 version of Title 24 was adopted by the CEC and became effective on January 1, 2020. The 2019 Title are applicable to building permit applications submitted on or after January 1, 2020. The 2019 Title 24 standards require solar photovoltaic systems for new homes, establish requirements for newly constructed healthcare facilities, encourage demand responsive technologies for residential buildings, and update indoor and outdoor lighting standards for nonresidential buildings. The CEC anticipates that nonresidential buildings will use approximately 30% less energy due to lighting upgrades compared to the prior code (17).

3.2.4 AB 1493 PAVLEY REGULATIONS AND FUEL EFFICIENCY STANDARDS

California AB 1493, enacted on July 22, 2002, required California Air Resource Board (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 33% of total retail sales by 2020 (18).

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 25% by 2027.
- Double the energy efficiency in existing buildings by 2030. This target will be achieved through the California Public Utility Commission (CPUC), the California Energy Commission (CEC), and local publicly owned utilities.
- Reorganize the Independent System Operator (ISO) to develop more regional electrify 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).

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4 PROJECT ENERGY DEMANDS AND ENERGY EFFICIENCY MEASURES

4.1 EVALUATION CRITERIA

Per Appendix F of the *State CEQA Guidelines* (19), 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* (20), 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 2020.4.0 outputs for the *First March Logistics (DOR20-00004) Air Quality Impact Analysis* (AQIA) (21) was utilized in this analysis, detailing Project related construction equipment, transportation energy demands, and facility energy demands.

4.2.1 CALEEMOD

In May 2021, the South Coast Air Quality Management District (SCAQMD), in conjunction with the California Air Pollution Control Officers Association (CAPCOA) and other California air districts, released the latest version of the CalEEMod version 2020.4.0. 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. (22). 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 Appendices 4.1 through Appendices 4.4.

4.2.2 EMISSION FACTORS MODEL

On August 19, 2019, the EPA approved the 2017 version of the EMissions FACTor model (EMFAC) web database for use in State Implementation Plan and transportation conformity analyses. EMFAC2017 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 (23). This energy study utilizes the different fuel types for each vehicle class from the annual EMFAC2017 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 2022 through 2024 analysis years were utilized to determine the average vehicle fuel economy used throughout the duration of the Project. Output from the EMFAC2017 model run is provided in Appendix 4.5.

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

As previously stated, Building 1 (Phase 1) is anticipated to be constructed by the year 2023 while Project Buildout (Phase 2) is anticipated by year 2025. As such, Phase 1 construction is expected to commence in July 2022 and will last through November 2023. Phase 2 construction would commence in November 2023 and end in December 2024 (21). 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* (24).

TABLE 4-1: CONSTRUCTION DURATION

Phase	Construction Activity	Start Date	End Date	Days
Building 1 (Phase 1)	Site Preparation	07/01/2022	07/14/2022	10
	Grading	07/15/2022	08/25/2022	30
	Building Construction	08/26/2022	10/19/2023	300
	Paving	10/20/2023	11/16/2023	20
	Architectural Coating	09/22/2023	11/16/2023	40
Project Buildout (Phase 2)	Site Preparation	11/17/2023	11/30/2023	10
	Grading	12/01/2023	12/28/2023	20
	Building Construction	12/29/2023	11/14/2024	230
	Paving	11/15/2024	12/12/2024	20
	Architectural Coating	10/18/2024	12/12/2024	40

PROJECT CONSTRUCTION POWER COST

The *2021 National Construction Estimator* identifies a typical power cost per 1,000 sf of construction per month of \$2.37, which was used to calculate the Project's total construction power cost (25).

As shown on Table 4-2, the total power cost of the on-site electricity usage during the construction of the Project is estimated to be approximately \$41,608.33.

TABLE 4-2: CONSTRUCTION POWER COST

Phase	Land Use	Power Cost (per 1,000 SF)	Size (1,000 SF)	Construction Duration (months)	Project Construction Power Cost
Building 1 (Phase 1)	Manufacturing	\$2.37	100.000	16	\$3,792.00
	High-Cube Fulfillment Center	\$2.37	350.000	16	\$13,272.00
	Parking Lot	\$2.37	102.031	16	\$3,869.02
	Landscape	\$2.37	119.841	16	\$4,544.37
	Other Asphalt Surfaces	\$2.37	198.942	16	\$7,543.88
BUILDING 1 (PHASE 1) CONSTRUCTION POWER COST					\$33,021.27
Project Buildout (Phase 2)	Warehousing	\$2.37	139.971	13	\$4,312.51
	Parking	\$2.37	20.026	13	\$617.00
	Landscape	\$2.37	33.787	13	\$1,040.98
	Other Asphalt Surfaces	\$2.37	84.926	13	\$2,616.57
PROJECT BUILDOUT (PHASE 2) CONSTRUCTION POWER COST					\$8,587.06
TOTAL CONSTRUCTION POWER COST					\$41,608.33

4.3.2 CONSTRUCTION ELECTRICITY USAGE

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

PROJECT CONSTRUCTION ELECTRICITY USAGE

The SCE's general service rate schedule were used to determine the Project's electrical usage. As of October 1, 2021, SCE's general service rate is \$0.13 per kilowatt hours (kWh) of electricity for industrial services (26). As shown on Table 4-3, the total electricity usage from on-site Project construction related activities is estimated to be approximately 320,064 kWh.

TABLE 4-3: CONSTRUCTION ELECTRICITY USAGE

Phase	Land Use	Cost per kWh	Project Construction Electricity Usage (kWh)
Building 1 (Phase 1)	Manufacturing	\$0.13	29,169
	High-Cube Fulfillment Center	\$0.13	102,092
	Parking Lot	\$0.13	29,762
	Landscape	\$0.13	34,957
	Other Asphalt Surfaces	\$0.13	58,030
BUILDING 1 (PHASE 1) CONSTRUCTION ELECTRICITY USAGE			254,010
Project Buildout (Phase 2)	Warehousing	\$0.13	33,173
	Parking	\$0.13	4,746
	Landscape	\$0.13	8,008
	Other Asphalt Surfaces	\$0.13	20,127
PROJECT BUILDOUT (PHASE 2) CONSTRUCTION ELECTRICITY USAGE			66,054
TOTAL CONSTRUCTION ELECTRICITY USAGE			320,064

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

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. It should be noted that most pieces of equipment would likely operate for fewer hours per day. A summary of construction equipment assumptions by phase is provided at Table 4-4.

PROJECT CONSTRUCTION EQUIPMENT FUEL CONSUMPTION

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

TABLE 4-4: CONSTRUCTION EQUIPMENT ASSUMPTIONS

Phase	Construction Activity	Equipment	Amount	Hours Per Day
Building 1 (Phase 1)	Site Preparation	Crawler Tractors	4	8
		Rubber Tired Dozers	3	8
	Grading	Crawler Tractors	2	8
		Excavators	2	8
		Graders	1	8
		Rubber Tired Dozers	1	8
		Scrapers	2	8
	Building Construction	Cranes	1	8
		Crawler Tractors	3	8
		Forklifts	3	8
		Generator Sets	1	8
		Welders	1	8
	Paving	Pavers	2	8
		Paving Equipment	2	8
		Rollers	2	8
	Architectural Coating	Air Compressors	1	8
Project Buildout (Phase 2)	Site Preparation	Crawler Tractors	4	8
		Rubber Tired Dozers	3	8
	Grading	Crawler Tractors	3	8
		Excavators	1	8
		Graders	1	8
		Rubber Tired Dozers	1	8
	Building Construction	Cranes	1	8
		Crawler Tractors	3	8
		Forklifts	3	8
		Generator Sets	1	8
		Welders	1	8
	Paving	Pavers	2	8
		Paving Equipment	2	8
		Rollers	2	8
	Architectural Coating	Air Compressors	1	8

TABLE 4-5: CONSTRUCTION EQUIPMENT FUEL CONSUMPTION ESTIMATES (1 OF 2)

Phase	Construction Activity	Duration (Days)	Equipment	HP Rating	Quantity	Usage Hours	Load Factor	HP-hrs/day	Total Fuel Consumption
Building 1 (Phase 1)	Site Preparation	10	Crawler Tractors	212	4	8	0.43	2,917	1,577
			Rubber Tired Dozers	247	3	8	0.40	2,371	1,282
	Grading	30	Crawler Tractors	212	2	8	0.43	1,459	2,365
			Excavators	158	2	8	0.38	961	1,558
			Graders	187	1	8	0.41	613	995
			Rubber Tired Dozers	247	1	8	0.40	790	1,282
			Scrapers	367	2	8	0.48	2,819	4,571
			Cranes	231	1	8	0.29	536	8,691
	Building Construction	300	Crawler Tractors	212	3	8	0.43	2,188	35,478
			Forklifts	89	3	8	0.20	427	6,928
			Generator Sets	84	1	8	0.74	497	8,064
			Welders	46	1	8	0.45	166	2,685
			Pavers	130	2	8	0.42	874	944
	Paving	20	Paving Equipment	132	2	8	0.36	760	822
			Rollers	80	2	8	0.38	486	526
			Air Compressors	78	1	8	0.48	300	648
BUILDING 1 (PHASE 1) CONSTRUCTION FUEL DEMAND (GALLONS DIESEL FUEL)								78,414	

TABLE 4-5: CONSTRUCTION EQUIPMENT FUEL CONSUMPTION ESTIMATES (2 OF 2)

Phase	Construction Activity	Duration (Days)	Equipment	HP Rating	Quantity	Usage Hours	Load Factor	HP-hrs/day	Total Fuel Consumption
Project Buildout (Phase 2)	Site Preparation	10	Crawler Tractors	212	4	8	0.43	2,917	1,577
			Rubber Tired Dozers	247	3	8	0.40	2,371	1,282
	Grading	20	Crawler Tractors	212	3	8	0.43	2,188	2,365
			Excavators	158	1	8	0.38	480	519
			Graders	187	1	8	0.41	613	663
			Rubber Tired Dozers	247	1	8	0.40	790	854
	Building Construction	230	Cranes	231	1	8	0.29	536	6,663
			Crawler Tractors	212	3	8	0.43	2,188	27,200
			Forklifts	89	3	8	0.20	427	5,311
			Generator Sets	84	1	8	0.74	497	6,182
			Welders	46	1	8	0.45	166	2,059
	Paving	20	Pavers	130	2	8	0.42	874	944
			Paving Equipment	132	2	8	0.36	760	822
			Rollers	80	2	8	0.38	486	526
	Architectural Coating	40	Air Compressors	78	1	8	0.48	300	648
PROJECT BUILDOUT (PHASE 2) CONSTRUCTION FUEL DEMAND (GALLONS DIESEL FUEL)								57,616	
TOTAL CONSTRUCTION FUEL DEMAND (GALLONS DIESEL FUEL)									136,030

Diesel fuel would be supplied by existing commercial fuel providers serving the Project area and region³. As previously presented in Table 4-5, Project construction activities would consume an estimated 136,030 gallons of diesel fuel. Project construction would represent a “single-event” diesel fuel demand and would not require on-going or permanent commitment of diesel fuel resources for this purpose.

4.3.3 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

Phase	Construction Activity	Worker Trips Per Day	Vendor Trips Per Day	Hauling Trips Per Day
Building 1 (Phase 1)	Site Preparation	18	4	0
	Grading	20	12	0
	Building Construction	366	119	0
	Paving	15	8	0
	Architectural Coating	73	0	0
Project Buildout (Phase 2)	Site Preparation	18	2	0
	Grading	15	3	0
	Building Construction	117	38	0
	Paving	15	3	0
	Architectural Coating	23	0	0

4.3.4 CONSTRUCTION WORKER FUEL ESTIMATES

With respect to estimated VMT for the Project, the construction worker trips would generate an estimated 2,107,539 VMT during the 29 months of construction (21). Based on CalEEMod methodology, it is assumed that 50% of all worker trips are from light-duty-auto vehicles (LDA), 25% are from light-duty-trucks (LDT1⁴), and 25% are from light-duty-trucks (LDT2⁵). Data

³ Based on Appendix A of the CalEEMod User’s Guide, Construction consists of several types of off-road equipment. Since the majority of the off-road construction equipment used for construction projects are diesel fueled, CalEEMod assumes all of the equipment operates on diesel fuel.

⁴ Vehicles under the LDT1 category have a gross vehicle weight rating (GVWR) of less than 6,000 lbs. and equivalent test weight (ETW) of less than or equal to 3,750 lbs.

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

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 2017 version of the EMFAC developed by CARB. EMFAC2017 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 (23). EMFAC2017 was run for the LDA, LDT1, and LDT2 vehicle class within the California sub-area for the 2022 through 2024 calendar years. Data from EMFAC2017 is shown in Appendix 4.5.

Table 4-7 provides an estimated annual fuel consumption resulting from Project construction worker trips. Based on Table 4-7, it is estimated that 69,375 gallons of fuel will be consumed related to construction worker trips during full construction of the Project.

It should be noted that construction worker trips would represent a “single-event” gasoline fuel demand and would not require on-going or permanent commitment of fuel resources for this purpose.

4.3.5 CONSTRUCTION VENDOR FUEL ESTIMATES

With respect to estimated VMT, the construction vendor trips (vehicles that deliver materials to the site during construction) would generate an estimated 313,812 VMT along area roadways for the Project over the duration of construction activity (21). It is assumed that 50% of all vendor trips are from medium-heavy duty trucks (MHDT) and 50% are from heavy-heavy duty trucks (HHDT). These assumptions are consistent with the CalEEMod defaults utilized within the AQIA (21). Vehicle fuel efficiencies for MHDTs and HHDTs were estimated using information generated within EMFAC2017. EMFAC2017 was run for the MHDT and HHDT vehicle classes within the California sub-area for the 2022 through 2024 calendar years. Data from EMFAC2017 is shown in Appendix 4.5.

Based on Table 4-8, it is estimated that 76,280 gallons of fuel will be consumed related to construction vendor trips during full construction of the Project.

It should be noted that Project construction vendor trips would represent a “single-event” diesel fuel demand and would not require on-going or permanent commitment of diesel fuel resources for this purpose.

TABLE 4-7: CONSTRUCTION WORKER FUEL CONSUMPTION ESTIMATES (1 OF 3)

Phase	Vehicle Type	Phase Name	Duration (Days)	Worker Trips / Day	Trip Length (miles)	VMT	Average Vehicle Fuel Economy (mpg)	Estimated Fuel Consumption (gallons)
Building 1 (Phase 1)	LDA	2022						
		Site Preparation	10	9	14.7	1,323	32.77	40
		Grading	30	10	14.7	4,410	32.77	135
		Building Construction	91	183	14.7	244,799	32.77	7,470
	LDT1	2023						
		Building Construction	209	183	14.7	562,231	33.79	16,641
		Paving	20	8	14.7	2,352	33.79	70
		Architectural Coating	40	37	14.7	21,756	33.79	644
	LDT2	2022						
		Site Preparation	10	5	14.7	735	27.55	27
		Grading	30	5	14.7	2,205	27.55	80
		Building Construction	91	92	14.7	123,068	27.55	4,467
		2023						
		Building Construction	209	92	14.7	282,652	28.38	9,959
		Paving	20	4	14.7	1,176	28.38	41
		Architectural Coating	40	19	14.7	11,172	28.38	394

TABLE 4-7: CONSTRUCTION WORKER FUEL CONSUMPTION ESTIMATES (2 OF 3)

Phase	Vehicle Type	Phase Name	Duration (Days)	Worker Trips / Day	Trip Length (miles)	VMT	Average Vehicle Fuel Economy (mpg)	Estimated Fuel Consumption (gallons)
Building 1 (Phase 1)	LDT2	2023						
		Building Construction	209	92	14.7	282,652	27.02	10,460
		Paving	20	4	14.7	1,176	27.02	44
		Architectural Coating	40	19	14.7	11,172	27.02	413
BUILDING 1 (PHASE 1) CONSTRUCTION WORKER FUEL CONSUMPTION								55,725
Project Buildout (Phase 2)	LDA	2022						
		Site Preparation	10	9	14.7	1,323	33.79	39
		Grading	20	8	14.7	2,352	33.79	70
		Building Construction	1	59	14.7	867	33.79	26
		2023						
		Building Construction	229	59	14.7	198,612	34.87	5,695
	LDT1	Paving	20	8	14.7	2,352	34.87	67
		Architectural Coating	40	12	14.7	7,056	34.87	202
		2022						
		Site Preparation	10	5	14.7	735	28.38	26
		Grading	20	4	14.7	1,176	28.38	41
		Building Construction	1	30	14.7	441	28.38	16
		2023						
		Building Construction	229	30	14.7	100,989	29.26	3,452
		Paving	20	4	14.7	1,176	29.26	40
		Architectural Coating	40	6	14.7	3,528	29.26	121

TABLE 4-7: CONSTRUCTION WORKER FUEL CONSUMPTION ESTIMATES (3 OF 3)

Phase	Vehicle Type	Phase Name	Duration (Days)	Worker Trips / Day	Trip Length (miles)	VMT	Average Vehicle Fuel Economy (mpg)	Estimated Fuel Consumption (gallons)	
Project Buildout (Phase 2)	LDT2	2022							
		Site Preparation	10	5	14.7	735	27.02	27	
		Grading	20	4	14.7	1,176	27.02	44	
		Building Construction	1	30	14.7	441	27.02	16	
		2023							
		Building Construction	229	30	14.7	100,989	28.05	3,601	
		Paving	20	4	14.7	1,176	28.05	42	
		Architectural Coating	40	6	14.7	3,528	28.05	126	
PROJECT BUILDOUT (PHASE 2) CONSTRUCTION WORKER FUEL CONSUMPTION								13,650	
TOTAL PROJECT CONSTRUCTION WORKER FUEL CONSUMPTION								69,375	

TABLE 4-8: CONSTRUCTION VENDOR FUEL CONSUMPTION ESTIMATES (1 OF 3)

Phase	Vehicle Type	Phase Name	Duration (Days)	Vendor Trips / Day	Trip Length (miles)	VMT	Average Vehicle Fuel Economy (mpg)	Estimated Fuel Consumption (gallons)
Building 1 (Phase 1)	MHDT	2022						
		Site Preparation	10	2	6.9	138	10.34	13
		Grading	30	6	6.9	1,242	10.34	120
		Building Construction	91	60	6.9	37,674	10.34	3,644
		2023						
	HHDT	Building Construction	209	60	6.9	86,526	10.74	8,057
		Paving	20	4	6.9	552	10.74	51
		Architectural Coating	40	0	6.9	0	10.74	0
		2022						
		Site Preparation	10	2	6.9	138	7.06	20
		Grading	30	6	6.9	1,242	7.06	176
		Building Construction	91	60	6.9	37,674	7.06	5,335
		2023						
		Building Construction	209	60	6.9	86,526	7.44	11,637
		Paving	20	4	6.9	552	7.44	74
		Architectural Coating	40	0	6.9	0	7.44	0
BUILDING 1 (PHASE 1) CONSTRUCTION VENDOR FUEL CONSUMPTION								29,127

TABLE 4-8: CONSTRUCTION VENDOR FUEL CONSUMPTION ESTIMATES (2 OF 3)

Phase	Vehicle Type	Phase Name	Duration (Days)	Vendor Trips / Day	Trip Length (miles)	VMT	Average Vehicle Fuel Economy (mpg)	Estimated Fuel Consumption (gallons)	
Project Buildout (Phase 2)	MHDT	2022							
		Site Preparation	10	1	6.9	69	10.74	6	
		Grading	20	2	6.9	276	10.74	26	
		Building Construction	1	19	6.9	131	10.74	12	
		2023							
	HHDT	Building Construction	229	19	6.9	30,022	10.91	2,753	
		Paving	20	2	6.9	276	10.91	25	
		Architectural Coating	40	0	6.9	0	10.91	0	
		2022							
		Site Preparation	10	1	6.9	69	7.44	9	
		Grading	20	2	6.9	276	7.44	37	
		Building Construction	1	19	6.9	131	7.44	18	
		2023							
		Building Construction	229	19	6.9	30,022	7.54	3,982	
		Paving	20	2	6.9	276	7.54	37	
		Architectural Coating	40	0	6.9	0	7.54	0	
PROJECT BUILDOUT (PHASE 2) CONSTRUCTION VENDOR FUEL CONSUMPTION								6,905	
TOTAL PROJECT CONSTRUCTION VENDOR FUEL CONSUMPTION								76,280	

4.3.6 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 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 City building officials, and/or in response to citizen complaints.

A full analysis related to the energy needed to form construction materials is not included in this analysis due to a lack of detailed Project-specific information on construction materials. At this time, an analysis of the energy needed to create Project-related construction materials would be extremely speculative and thus has not been prepared.

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

4.4 OPERATIONAL ENERGY DEMANDS

Energy consumption in support of or related to Project operations would include transportation energy demands (energy consumed by passenger car and truck vehicles accessing the Project site) and facilities energy demands (energy consumed by 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 EMFAC2017 developed by CARB (23). EMFAC2017 was run for the Riverside County area for the 2023 and 2024 calendar years. Data from EMFAC2017 is shown in Appendix 4.5.

As summarized on Table 4-9 the Project will result in 5,812,961 annual VMT and an estimated annual fuel consumption of 378,461 gallons of fuel during Building 1 (Phase 1) and 7,090,762 annual VMT and an estimated annual fuel consumption of 469,889 gallons of fuel during Project Buildout (Phase 2).

TABLE 4-9: TOTAL PROJECT-GENERATED TRAFFIC ANNUAL FUEL CONSUMPTION (1 OF 2)

Phase	Vehicle Type	Annual VMT	Average Vehicle Fuel Economy (mpg)	Estimated Annual Fuel Consumption (gallons)
Building 1 (Phase 1)	LDA	2,128,410	33.79	62,997
	LDT1	222,818	28.38	7,851
	LDT2	686,930	27.02	25,422
	MDV	561,294	21.45	26,162
	MCY	95,705	37.90	2,525
	LHDT1	227,634	14.58	15,614
	LHDT2	62,638	15.26	4,106
	MHDT	289,987	10.74	27,004
	HHDT	1,537,544	7.44	206,781
	TOTAL	5,812,961	-	378,461

TABLE 4-9: TOTAL PROJECT-GENERATED TRAFFIC ANNUAL FUEL CONSUMPTION (2 OF 2)

Phase	Vehicle Type	Annual VMT	Average Vehicle Fuel Economy (mpg)	Estimated Annual Fuel Consumption (gallons)
Project Buildout (Phase 2)	LDA	2,462,272	34.87	70,605
	LDT1	257,417	29.26	8,799
	LDT2	792,675	28.05	28,261
	MDV	633,545	22.23	28,506
	MCY	108,924	37.87	2,877
	LHDT1	326,387	14.80	22,055
	LHDT2	90,492	15.46	5,854
	MHDT	437,992	10.91	40,158
	HHDT	1,981,058	7.54	262,775
	TOTAL	7,090,762	-	469,889

CALGREEN STANDARDS

Pursuant to Section 5.106.5.3.2 of the CALGreen Code, 12 parking spaces will provide conduits for the charging of electric vehicles. As shown in Table 4-10, in the event that 12 EV parking spaces are installed, this will result in 84,672 kWh/year. However, as shown in Table 4-11, though the Project's energy usage will be increased with the installation of the EV parking spaces, there will be a decrease in annual VMT of 338,688 miles/yr and thus an overall savings in fuel demand.

TABLE 4-10: ELECTRICITY DEMAND FROM EV CHARGING STATIONS

Parameters	Amount	Unit
Annual Energy Delivery per Parking Space ¹	7,056	kWh/charging station/year
Number of Parking Spaces Provided Chargers	12	charging stations
ANNUAL EV CHARGING STATION ELECTRICITY DEMAND²	84,672	kWh/year

¹ Annual Energy Delivery and VMT reduction based on an average monthly energy delivery of 588 kWh per charging station for conventional Level 2 chargers, as estimated by the CEC.

Available at: <https://www.energy.ca.gov/2018publications/CEC-500-2018-020/CEC-500-2018-020.pdf>.

² Annual EV charging station electricity demand calculated by multiplying the Annual Energy Delivery per Parking Space by the Number of Parking Spaces Provided Chargers.

TABLE 4-11: VMT REDUCTION FROM EV CHARGING STATIONS

Parameters	Amount	Unit
SCE Electricity Emission Factor ¹	0.18	MTCO ₂ e/MWh
Fuel Economy of Electric Vehicle ²	0.25	kWh/miles
Annual Energy Delivery per Parking Space	7,056	kWh/charging station/year
Annual VMT Reduction per Parking Space ³	28,224	miles/charging station/yr
Number of Parking Spaces Provided Chargers	12	charging stations
ANNUAL VMT REDUCTION FROM ALL STATIONS⁴	338,688	miles/yr

¹ CO₂e weighted intensity factor for SCE accounts for CO₂ and CH₄ emissions rates and converted from lbs/MWh to MT/MWh.

² U.S. Department of Energy, 2013. Benefits and Considerations of Electricity as a Vehicle Fuel. Available at: https://afdc.energy.gov/fuels/electricity_benefits.html

³ Annual VMT reduction calculated as the annual energy delivery divided by the fuel economy of an EV.

⁴ Calculated by multiplying the Annual VMT Reductions per Parking Space and Number of Parking Spaces Provided Chargers.

4.4.2 FACILITY ENERGY DEMANDS

Project building operations activities would result in the consumption of natural gas and electricity. Natural gas would be supplied to the Project by SoCalGas; electricity would be supplied to the Project by SCE. As previously stated, the analysis herein assumes compliance with the 2019 Title 24 and CALGreen standards. Annual natural gas and electricity demands of the Project are summarized in Table 4-12 and 4-13 and provided in Appendices 4.3 and 4.4.

TABLE 4-12: PROJECT ANNUAL OPERATIONAL NATURAL GAS DEMAND SUMMARY

Natural Gas Demand		
Phase	Land Use	kBTU/year
Building 1 (Phase 1)	Manufacturing	3,233,000
	High-Cube Fulfillment Center	703,500
	BUILDING 1 (PHASE 1) NATURAL GAS DEMAND	3,936,500
Project Buildout (Phase 2)	Manufacturing	3,233,000
	High-Cube Fulfillment Center	703,500
	Warehousing	281,342
	PROJECT BUILDOUT (PHASE 2) NATURAL GAS DEMAND	4,217,842

kBTU – kilo-British Thermal Units

TABLE 4-13: PROJECT ANNUAL OPERATIONAL ELECTRICITY DEMAND SUMMARY

Electricity Demand		
Phase	Land Use	kWh/year
Building 1 (Phase 1)	Manufacturing	992,000
	High-Cube Fulfillment Center	812,000
	Parking Lot	35,711
	BUILDING 1 (PHASE 1) ELECTRICITY DEMAND	1,839,711
Project Buildout (Phase 2)	Manufacturing	992,000
	High-Cube Fulfillment Center	812,000
	Warehousing	324,733
	Parking	42,720
	PROJECT BUILDOUT (PHASE 2) ELECTRICITY DEMAND	2,171,453

kWh/Year – kilo-watt hours per year

4.4.3 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., Title24, California Green Building Standards Code). Project operation would also be required to comply with previously-identified mitigation measures from the PVCCSP EIR. Specifically, the Project would comply with PVCCSP EIR mitigation measures MM Air 19 and MM Air 20, which includes the installation of energy-efficient street lighting and sets performance standards on energy and water usage.

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.

The Property Owner/Developer would comply with the City's transportation demand management ordinance (see Chapter 17.78 of the Development Code).

4.5 SUMMARY

4.5.1 CONSTRUCTION ENERGY DEMANDS

The estimated power cost of on-site electricity usage during the construction of the Project is assumed to be approximately \$41,608.33. 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 320,064 kWh.

Construction equipment used by the Project would result in single event consumption of approximately 136,030 gallons of diesel fuel. Construction equipment use of fuel would not be atypical for the type of construction proposed because there are no aspects of the Project's proposed construction process that are unusual or energy-intensive, and Project construction equipment would conform to the applicable CARB emissions standards, acting to promote equipment fuel efficiencies.

CCR Title 13, Title 13, Motor Vehicles, section 2449(d)(3) Idling, limits idling times of construction vehicles to no more than 5 minutes, thereby precluding unnecessary and wasteful consumption of fuel due to unproductive idling of construction equipment. BACMs inform construction equipment operators of this requirement. Enforcement of idling limitations is realized through periodic site inspections conducted by City 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 69,375 gallons of fuel. Additionally, fuel consumption from construction vendor trips (MHDTs and HHDTs) will total approximately 76,280 gallons. Diesel fuel would be supplied by City and regional commercial vendors. Indirectly, construction energy efficiencies and energy conservation would be achieved using bulk purchases, transport and use of construction materials. The 2020 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 (16). 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 378,461 gallons of fuel during Building 1 (Phase 1) and 469,889 gallons of fuel during Project Buildout (Phase 2).

Fuel would be provided by current and future commercial 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 (10th Ed., 2017); 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-duty trucks are being tested this year and SCAQMD 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 (28).
- CARB's Heavy-Duty (Tractor-Trailer) GHG Regulation requires SmartWay tractor trailers that include idle-reduction technologies, aerodynamic technologies, and low-rolling resistant tires that would reduce fuel consumption and associated GHG emissions.

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

Enhanced fuel economies realized pursuant to federal and state regulatory actions, and related transition of vehicles to alternative energy sources (e.g., electricity, natural gas, biofuels, hydrogen cells) would likely decrease future gasoline fuel demands per VMT. Location of the Project proximate to regional and local roadway systems tends to reduce VMT within the region, acting to reduce regional vehicle energy demands. The Project would improve the existing sidewalk along Natwar Lane and construct sidewalk along the west side of Natwar Lane adjacent to the Project site to facilitate and encourage pedestrian access. Facilitating pedestrian and bicycle access would reduce VMT and associated energy consumption. In compliance with the California Green Building Standards Code and City requirements, the Project would promote the use of bicycles as an alternative mean of transportation by providing short-term and/or long-

term bicycle parking accommodations. As supported by the preceding discussions, Project transportation energy consumption would not be considered inefficient, wasteful, or otherwise unnecessary.

FACILITY ENERGY DEMANDS

Project facility operational energy demands are estimated at: 3,936,500 kBtu/year of natural gas; and 1,839,711 kWh/year of electricity during Building 1 (Phase 1) and 4,217,842 kBtu/year of natural gas; and 2,171,4523 kWh/year of electricity during Project Buildout (Phase 2). Natural gas would be supplied to the Project by SoCalGas; electricity would be supplied by SCE. 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.

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

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

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

5.2 ENERGY IMPACT 2

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

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

CONSISTENCY WITH ISTEA

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

CONSISTENCY WITH TEA-21

The Project site is located along major transportation corridors with proximate access to the Interstate freeway system. Specifically, the Project site is located immediately east of Interstate (I)-215, 1.74 miles north of Ramona Expressway, and approximately 5.0 miles south of State Route (SR)-60. As such, the site selected for the Project facilitates access, acts to reduce vehicle miles traveled, takes advantage of existing infrastructure systems, and promotes land use compatibilities through collocation of similar uses. The Project supports the strong planning processes emphasized under TEA-21. The Project is therefore consistent with, and would not otherwise interfere with, nor obstruct implementation of TEA-21.

CONSISTENCY WITH IEPR

Electricity would be provided to the Project by SCE. SCE's *Clean Power and Electrification Pathway* (CPEP) white paper presents SCE's integrated blueprint for California to reduce greenhouse gas emissions and air pollutants and builds on existing state programs and policies. The CPEP will help California achieve its climate goals and significantly reduce today's health-harming air pollution in local communities. As such, the Project is consistent with, and would not otherwise interfere with, nor obstruct implementation the goals presented in the 2020 IEPR.

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

As such, development of the proposed Project would support the goals presented in the 2020 IEPR.

CONSISTENCY WITH STATE OF CALIFORNIA ENERGY PLAN

The Project site is located along major transportation corridors with proximate access to the Interstate freeway system. Specifically, the Project site is located immediately east of Interstate (I)-215, 1.74 miles north of Ramona Expressway, and approximately 5.0 miles south of State Route (SR)-60. As such, the site selected for the Project facilitates access and takes advantage of existing infrastructure systems. The Project therefore supports urban design and planning processes identified under the State of California Energy Plan and would not otherwise interfere with, nor obstruct implementation of the State of California Energy Plan.

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

The 2019 version of Title 24 was adopted by the CEC and became effective on January 1, 2020. It should be noted that the analysis herein assumes compliance with the 2019 Title 24 Standards. It should be noted that the CEC anticipates that nonresidential buildings will use approximately 30% less energy compared to the prior code (17). The proposed Project would be subject to Title 24 standards.

CONSISTENCY WITH CALIFORNIA CODE TITLE 24, PART 11, CALGREEN

As previously stated, CCR, Title 24, Part 11: CALGreen is a comprehensive and uniform regulatory code for all residential, commercial, and school buildings that went in effect on January 1, 2009, and is administered by the California Building Standards Commission. CALGreen is updated on a regular basis, with the most recent approved update consisting of the 2019 California Green Building Code Standards that became effective January 1, 2020. The proposed Project would be subject to CALGreen standards.

CONSISTENCY WITH AB 1493

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

CONSISTENCY WITH RPS

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

CONSISTENCY WITH SB 350

The proposed Project would use energy from SCE, which have committed to diversify their portfolio of energy sources by increasing energy from wind and solar sources. No feature of the Project would interfere with implementation of SB 350. Additionally, the Project would be designed and constructed to implement the energy efficiency measures for new industrial developments and would include several measures designed to reduce energy consumption such as facilitating pedestrian and bicycle access to the Project site to reduce VMT.

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

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7 CERTIFICATIONS

The contents of this energy analysis report represent an accurate depiction of the environmental impacts associated with the proposed First March Logistics. 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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EDUCATION

- Master of Science in Environmental Studies
California State University, Fullerton • May 2010
- Bachelor of Arts in Environmental Analysis and Design
University of California, Irvine • June 2006

PROFESSIONAL AFFILIATIONS

- AEP – Association of Environmental 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 – California Air Resources Board • August 2007
AB2588 Regulatory Standards – Trinity Consultants • November 2006
Air Dispersion Modeling – Lakes Environmental • June 2006

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APPENDIX 4.1:

CALEEMOD BUILDING 1 (PHASE 1) CONSTRUCTION EMISSIONS MODEL OUTPUTS

First March Logistics (Building 1 Construction - Unmitigated) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**First March Logistics (Building 1 Construction - Unmitigated)**

Riverside-South Coast County, Annual

1.0 Project Characteristics**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Manufacturing	100.00	1000sqft	2.30	100,000.00	0
Unrefrigerated Warehouse-No Rail	350.00	1000sqft	8.03	350,000.00	0
Other Asphalt Surfaces	198.97	1000sqft	4.57	198,972.00	0
Parking Lot	262.00	Space	2.34	102,031.00	0
City Park	2.75	Acre	2.75	119,841.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
Climate Zone	10			Operational Year	2023
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Total Project Area (Building 1) is 19.99 acres

Construction Phase - Construction anticipated to end in 2023

Off-road Equipment - Hours are based on an 8-hour workday

Off-road Equipment - Crawler Tractors used in lieu of Tractors/Loaders/Backhoes

Off-road Equipment - Crawler Tractors used in lieu of Tractors/Loaders/Backhoes

Off-road Equipment -

Off-road Equipment - Crawler Tractors used in lieu of Tractors/Loaders/Backhoes

First March Logistics (Building 1 Construction - Unmitigated) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Trips and VMT - Vendor Trips adjusted based on CalEEMod defaults for Building Construction and number of days for Site Preparation, Grading, Building Construction, and Paving

Grading - Analysis conservatively assumes that the entire Project site (20 acres) can be disturbed per day

Architectural Coating - PVCC MM Air 9

Vehicle Trips - Construction run only

Energy Use - Construction run only

Water And Wastewater - Construction run only

Solid Waste - Construction run only

Construction Off-road Equipment Mitigation - Rule 403

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	10.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	10.00
tblConstructionPhase	NumDays	20.00	40.00
tblEnergyUse	LightingElect	2.93	0.00
tblEnergyUse	LightingElect	0.35	0.00
tblEnergyUse	LightingElect	1.17	0.00
tblEnergyUse	NT24E	5.02	0.00
tblEnergyUse	NT24E	0.82	0.00
tblEnergyUse	NT24NG	17.13	0.00
tblEnergyUse	NT24NG	0.03	0.00
tblEnergyUse	T24E	1.97	0.00
tblEnergyUse	T24E	0.33	0.00
tblEnergyUse	T24NG	15.20	0.00
tblEnergyUse	T24NG	1.98	0.00
tblGrading	AcresOfGrading	120.00	600.00
tblGrading	AcresOfGrading	35.00	200.00
tblLandUse	LandUseSquareFeet	104,800.00	102,031.00
tblLandUse	LandUseSquareFeet	119,790.00	119,841.00
tblLandUse	LotAcreage	2.36	2.34

First March Logistics (Building 1 Construction - Unmitigated) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblSolidWaste	SolidWasteGenerationRate	0.24	0.00
tblSolidWaste	SolidWasteGenerationRate	124.00	0.00
tblSolidWaste	SolidWasteGenerationRate	329.00	0.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	12.00
tblTripsAndVMT	VendorTripNumber	143.00	119.00
tblTripsAndVMT	VendorTripNumber	0.00	8.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TTP	48.00	0.00
tblVehicleTrips	CC_TTP	28.00	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CNW_TTP	13.00	0.00
tblVehicleTrips	CNW_TTP	41.00	0.00
tblVehicleTrips	CW_TL	16.60	0.00

First March Logistics (Building 1 Construction - Unmitigated) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TTP	33.00	0.00
tblVehicleTrips	CW_TTP	59.00	0.00
tblVehicleTrips	CW_TTP	59.00	0.00
tblVehicleTrips	DV_TP	28.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	6.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	66.00	0.00
tblVehicleTrips	PR_TP	92.00	0.00
tblVehicleTrips	PR_TP	92.00	0.00
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	ST_TR	6.42	0.00
tblVehicleTrips	ST_TR	1.74	0.00
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	SU_TR	5.09	0.00
tblVehicleTrips	SU_TR	1.74	0.00
tblVehicleTrips	WD_TR	0.78	0.00
tblVehicleTrips	WD_TR	3.93	0.00
tblVehicleTrips	WD_TR	1.74	0.00
tblWater	IndoorWaterUseRate	23,125,000.00	0.00
tblWater	IndoorWaterUseRate	80,937,500.00	0.00
tblWater	OutdoorWaterUseRate	3,276,573.71	0.00

First March Logistics (Building 1 Construction - Unmitigated) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**2.0 Emissions Summary****2.1 Overall Construction****Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Year	tons/yr										MT/yr						
2022	0.2823	2.6145	2.0065	5.9400e-003	0.8277	0.1018	0.9294	0.2051	0.0945	0.2996	0.0000	535.4003	535.4003	0.0896	0.0187	543.2099	
2023	0.6845	3.4000	3.4291	0.0106	0.5172	0.1294	0.6465	0.1391	0.1208	0.2600	0.0000	964.1962	964.1962	0.1226	0.0400	979.1753	
Maximum	0.6845	3.4000	3.4291	0.0106	0.8277	0.1294	0.9294	0.2051	0.1208	0.2996	0.0000	964.1962	964.1962	0.1226	0.0400	979.1753	

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Year	tons/yr										MT/yr						
2022	0.2823	2.6145	2.0065	5.9400e-003	0.4587	0.1018	0.5605	0.1166	0.0945	0.2111	0.0000	535.4000	535.4000	0.0896	0.0187	543.2096	
2023	0.6845	3.4000	3.4291	0.0106	0.5172	0.1294	0.6465	0.1391	0.1208	0.2600	0.0000	964.1957	964.1957	0.1226	0.0400	979.1748	
Maximum	0.6845	3.4000	3.4291	0.0106	0.5172	0.1294	0.6465	0.1391	0.1208	0.2600	0.0000	964.1957	964.1957	0.1226	0.0400	979.1748	

First March Logistics (Building 1 Construction - Unmitigated) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	27.44	0.00	23.41	25.72	0.00	15.82	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	7-1-2022	9-30-2022	1.5790	1.5790
2	10-1-2022	12-31-2022	1.3263	1.3263
3	1-1-2023	3-31-2023	1.1287	1.1287
4	4-1-2023	6-30-2023	1.1356	1.1356
5	7-1-2023	9-30-2023	1.1961	1.1961
		Highest	1.5790	1.5790

2.2 Overall Operational**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr											MT/yr				
Area	1.8605	1.1000e-004	0.0117	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0227	0.0227	6.0000e-005	0.0000	0.0242
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	1.8605	1.1000e-004	0.0117	0.0000	0.0000	4.0000e-005	4.0000e-005	0.0000	4.0000e-005	4.0000e-005	0.0000	0.0227	0.0227	6.0000e-005	0.0000	0.0242

First March Logistics (Building 1 Construction - Unmitigated) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**2.2 Overall Operational****Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Area	1.8605	1.1000e-004	0.0117	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0227	0.0227	6.0000e-005	0.0000	0.0242	
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Total	1.8605	1.1000e-004	0.0117	0.0000	0.0000	4.0000e-005	4.0000e-005	0.0000	4.0000e-005	4.0000e-005	0.0000	0.0227	0.0227	6.0000e-005	0.0000	0.0242	

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	7/1/2022	7/14/2022	5	10	
2	Grading	Grading	7/15/2022	8/25/2022	5	30	
3	Building Construction	Building Construction	8/26/2022	10/19/2023	5	300	

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4	Architectural Coating	Architectural Coating	9/22/2023	11/16/2023	5	40
5	Paving	Paving	10/20/2023	11/16/2023	5	20

Acres of Grading (Site Preparation Phase): 200**Acres of Grading (Grading Phase): 600****Acres of Paving: 6.91**

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 675,000; Non-Residential Outdoor: 225,000; Striped Parking Area: 18,060 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Crawler Tractors	4	8.00	212	0.43
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Grading	Crawler Tractors	2	8.00	212	0.43
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Crawler Tractors	3	8.00	212	0.43
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38

First March Logistics (Building 1 Construction - Unmitigated) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Architectural Coating	Air Compressors	1	8.00	78	0.48
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Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	12.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	366.00	119.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	8.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	73.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Site Preparation - 2022**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr										MT/yr						
Fugitive Dust					0.1964	0.0000	0.1964	0.0611	0.0000	0.0611	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	0.0224	0.2521	0.1000	2.8000e-004	0.0108	0.0108		9.9300e-003	9.9300e-003	0.0000	25.0258	25.0258	8.0900e-003	0.0000	25.2281		
Total	0.0224	0.2521	0.1000	2.8000e-004	0.1964	0.0108	0.2072	0.0611	9.9300e-003	0.0710	0.0000	25.0258	25.0258	8.0900e-003	0.0000	25.2281	

First March Logistics (Building 1 Construction - Unmitigated) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.2 Site Preparation - 2022****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	3.0000e-005	8.9000e-004	3.0000e-004	0.0000	1.3000e-004	1.0000e-005	1.4000e-004	4.0000e-005	1.0000e-005	5.0000e-005	0.0000	0.3502	0.3502	0.0000	5.0000e-005	0.3658	
Worker	3.1000e-004	2.4000e-004	3.0700e-003	1.0000e-005	9.9000e-004	1.0000e-005	9.9000e-004	2.6000e-004	0.0000	2.7000e-004	0.0000	0.7822	0.7822	2.0000e-005	2.0000e-005	0.7892	
Total	3.4000e-004	1.1300e-003	3.3700e-003	1.0000e-005	1.1200e-003	2.0000e-005	1.1300e-003	3.0000e-004	1.0000e-005	3.2000e-004	0.0000	1.1325	1.1325	2.0000e-005	7.0000e-005	1.1550	

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0766	0.0000	0.0766	0.0238	0.0000	0.0238	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0224	0.2521	0.1000	2.8000e-004		0.0108	0.0108		9.9300e-003	9.9300e-003	0.0000	25.0257	25.0257	8.0900e-003	0.0000	25.2281
Total	0.0224	0.2521	0.1000	2.8000e-004	0.0766	0.0108	0.0874	0.0238	9.9300e-003	0.0338	0.0000	25.0257	25.0257	8.0900e-003	0.0000	25.2281

First March Logistics (Building 1 Construction - Unmitigated) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.2 Site Preparation - 2022****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	3.0000e-005	8.9000e-004	3.0000e-004	0.0000	1.3000e-004	1.0000e-005	1.4000e-004	4.0000e-005	1.0000e-005	5.0000e-005	0.0000	0.3502	0.3502	0.0000	5.0000e-005	0.3658	
Worker	3.1000e-004	2.4000e-004	3.0700e-003	1.0000e-005	9.9000e-004	1.0000e-005	9.9000e-004	2.6000e-004	0.0000	2.7000e-004	0.0000	0.7822	0.7822	2.0000e-005	2.0000e-005	0.7892	
Total	3.4000e-004	1.1300e-003	3.3700e-003	1.0000e-005	1.1200e-003	2.0000e-005	1.1300e-003	3.0000e-004	1.0000e-005	3.2000e-004	0.0000	1.1325	1.1325	2.0000e-005	7.0000e-005	1.1550	

3.3 Grading - 2022**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.4085	0.0000	0.4085	0.0840	0.0000	0.0840	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0642	0.7126	0.4379	1.0700e-003		0.0286	0.0286		0.0263	0.0263	0.0000	94.2610	94.2610	0.0305	0.0000	95.0231
Total	0.0642	0.7126	0.4379	1.0700e-003	0.4085	0.0286	0.4371	0.0840	0.0263	0.1103	0.0000	94.2610	94.2610	0.0305	0.0000	95.0231

First March Logistics (Building 1 Construction - Unmitigated) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.3 Grading - 2022****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	2.9000e-004	7.9900e-003	2.6900e-003	3.0000e-005	1.1400e-003	1.1000e-004	1.2500e-003	3.3000e-004	1.1000e-004	4.3000e-004	0.0000	3.1521	3.1521	3.0000e-005	4.7000e-004	3.2923	
Worker	1.0500e-003	8.2000e-004	0.0102	3.0000e-005	3.3000e-003	2.0000e-005	3.3100e-003	8.8000e-004	2.0000e-005	8.9000e-004	0.0000	2.6074	2.6074	7.0000e-005	7.0000e-005	2.6306	
Total	1.3400e-003	8.8100e-003	0.0129	6.0000e-005	4.4400e-003	1.3000e-004	4.5600e-003	1.2100e-003	1.3000e-004	1.3200e-003	0.0000	5.7595	5.7595	1.0000e-004	5.4000e-004	5.9229	

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1593	0.0000	0.1593	0.0328	0.0000	0.0328	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0642	0.7126	0.4379	1.0700e-003		0.0286	0.0286		0.0263	0.0263	0.0000	94.2609	94.2609	0.0305	0.0000	95.0230
Total	0.0642	0.7126	0.4379	1.0700e-003	0.1593	0.0286	0.1879	0.0328	0.0263	0.0591	0.0000	94.2609	94.2609	0.0305	0.0000	95.0230

First March Logistics (Building 1 Construction - Unmitigated) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.3 Grading - 2022****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	2.9000e-004	7.9900e-003	2.6900e-003	3.0000e-005	1.1400e-003	1.1000e-004	1.2500e-003	3.3000e-004	1.1000e-004	4.3000e-004	0.0000	3.1521	3.1521	3.0000e-005	4.7000e-004	3.2923	
Worker	1.0500e-003	8.2000e-004	0.0102	3.0000e-005	3.3000e-003	2.0000e-005	3.3100e-003	8.8000e-004	2.0000e-005	8.9000e-004	0.0000	2.6074	2.6074	7.0000e-005	7.0000e-005	2.6306	
Total	1.3400e-003	8.8100e-003	0.0129	6.0000e-005	4.4400e-003	1.3000e-004	4.5600e-003	1.2100e-003	1.3000e-004	1.3200e-003	0.0000	5.7595	5.7595	1.0000e-004	5.4000e-004	5.9229	

3.4 Building Construction - 2022**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1272	1.3543	0.8040	1.9600e-003		0.0580	0.0580		0.0541	0.0541	0.0000	169.6701	169.6701	0.0460	0.0000	170.8209
Total	0.1272	1.3543	0.8040	1.9600e-003		0.0580	0.0580		0.0541	0.0541	0.0000	169.6701	169.6701	0.0460	0.0000	170.8209

First March Logistics (Building 1 Construction - Unmitigated) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.4 Building Construction - 2022****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	8.6000e-003	0.2403	0.0810	9.9000e-004	0.0342	3.3000e-003	0.0375	9.8700e-003	3.1600e-003	0.0130	0.0000	94.8174	94.8174	1.0000e-003	0.0141	99.0352	
Worker	0.0582	0.0453	0.5673	1.5700e-003	0.1830	9.3000e-004	0.1840	0.0486	8.5000e-004	0.0495	0.0000	144.7342	144.7342	3.8600e-003	4.0100e-003	146.0247	
Total	0.0668	0.2857	0.6483	2.5600e-003	0.2173	4.2300e-003	0.2215	0.0585	4.0100e-003	0.0625	0.0000	239.5516	239.5516	4.8600e-003	0.0181	245.0598	

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1272	1.3543	0.8040	1.9600e-003		0.0580	0.0580		0.0541	0.0541	0.0000	169.6699	169.6699	0.0460	0.0000	170.8207
Total	0.1272	1.3543	0.8040	1.9600e-003		0.0580	0.0580		0.0541	0.0541	0.0000	169.6699	169.6699	0.0460	0.0000	170.8207

First March Logistics (Building 1 Construction - Unmitigated) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.4 Building Construction - 2022****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	8.6000e-003	0.2403	0.0810	9.9000e-004	0.0342	3.3000e-003	0.0375	9.8700e-003	3.1600e-003	0.0130	0.0000	94.8174	94.8174	1.0000e-003	0.0141	99.0352	
Worker	0.0582	0.0453	0.5673	1.5700e-003	0.1830	9.3000e-004	0.1840	0.0486	8.5000e-004	0.0495	0.0000	144.7342	144.7342	3.8600e-003	4.0100e-003	146.0247	
Total	0.0668	0.2857	0.6483	2.5600e-003	0.2173	4.2300e-003	0.2215	0.0585	4.0100e-003	0.0625	0.0000	239.5516	239.5516	4.8600e-003	0.0181	245.0598	

3.4 Building Construction - 2023**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2667	2.7384	1.8128	4.4900e-003		0.1167	0.1167		0.1089	0.1089	0.0000	389.4644	389.4644	0.1052	0.0000	392.0954
Total	0.2667	2.7384	1.8128	4.4900e-003		0.1167	0.1167		0.1089	0.1089	0.0000	389.4644	389.4644	0.1052	0.0000	392.0954

First March Logistics (Building 1 Construction - Unmitigated) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.4 Building Construction - 2023****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0135	0.4264	0.1699	2.1800e-003	0.0786	3.5400e-003	0.0821	0.0227	3.3900e-003	0.0261	0.0000	209.2279	209.2279	2.1100e-003	0.0309	218.5002	
Worker	0.1242	0.0920	1.2007	3.4900e-003	0.4204	2.0100e-003	0.4224	0.1116	1.8500e-003	0.1135	0.0000	323.6965	323.6965	7.9800e-003	8.4900e-003	326.4256	
Total	0.1376	0.5183	1.3706	5.6700e-003	0.4989	5.5500e-003	0.5045	0.1343	5.2400e-003	0.1395	0.0000	532.9244	532.9244	0.0101	0.0394	544.9258	

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2667	2.7384	1.8128	4.4900e-003		0.1167	0.1167		0.1089	0.1089	0.0000	389.4639	389.4639	0.1052	0.0000	392.0949
Total	0.2667	2.7384	1.8128	4.4900e-003		0.1167	0.1167		0.1089	0.1089	0.0000	389.4639	389.4639	0.1052	0.0000	392.0949

First March Logistics (Building 1 Construction - Unmitigated) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.4 Building Construction - 2023****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0135	0.4264	0.1699	2.1800e-003	0.0786	3.5400e-003	0.0821	0.0227	3.3900e-003	0.0261	0.0000	209.2279	209.2279	2.1100e-003	0.0309	218.5002
Worker	0.1242	0.0920	1.2007	3.4900e-003	0.4204	2.0100e-003	0.4224	0.1116	1.8500e-003	0.1135	0.0000	323.6965	323.6965	7.9800e-003	8.4900e-003	326.4256
Total	0.1376	0.5183	1.3706	5.6700e-003	0.4989	5.5500e-003	0.5045	0.1343	5.2400e-003	0.1395	0.0000	532.9244	532.9244	0.0101	0.0394	544.9258

3.5 Architectural Coating - 2023**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.2504					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.1100e-003	0.0348	0.0483	8.0000e-005		1.8900e-003	1.8900e-003		1.8900e-003	1.8900e-003	0.0000	6.8087	6.8087	4.1000e-004	0.0000	6.8189
Total	0.2555	0.0348	0.0483	8.0000e-005		1.8900e-003	1.8900e-003		1.8900e-003	1.8900e-003	0.0000	6.8087	6.8087	4.1000e-004	0.0000	6.8189

First March Logistics (Building 1 Construction - Unmitigated) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.5 Architectural Coating - 2023****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	4.7400e-003	3.5100e-003	0.0458	1.3000e-004	0.0161	8.0000e-005	0.0161	4.2600e-003	7.0000e-005	4.3300e-003	0.0000	12.3564	12.3564	3.0000e-004	3.2000e-004	12.4606	
Total	4.7400e-003	3.5100e-003	0.0458	1.3000e-004	0.0161	8.0000e-005	0.0161	4.2600e-003	7.0000e-005	4.3300e-003	0.0000	12.3564	12.3564	3.0000e-004	3.2000e-004	12.4606	

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.2504					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.1100e-003	0.0348	0.0483	8.0000e-005		1.8900e-003	1.8900e-003		1.8900e-003	1.8900e-003	0.0000	6.8087	6.8087	4.1000e-004	0.0000	6.8189
Total	0.2555	0.0348	0.0483	8.0000e-005		1.8900e-003	1.8900e-003		1.8900e-003	1.8900e-003	0.0000	6.8087	6.8087	4.1000e-004	0.0000	6.8189

First March Logistics (Building 1 Construction - Unmitigated) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.5 Architectural Coating - 2023****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	4.7400e-003	3.5100e-003	0.0458	1.3000e-004	0.0161	8.0000e-005	0.0161	4.2600e-003	7.0000e-005	4.3300e-003	0.0000	12.3564	12.3564	3.0000e-004	3.2000e-004	12.4606	
Total	4.7400e-003	3.5100e-003	0.0458	1.3000e-004	0.0161	8.0000e-005	0.0161	4.2600e-003	7.0000e-005	4.3300e-003	0.0000	12.3564	12.3564	3.0000e-004	3.2000e-004	12.4606	

3.6 Paving - 2023**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0103	0.1019	0.1458	2.3000e-004		5.1000e-003	5.1000e-003		4.6900e-003	4.6900e-003	0.0000	20.0269	20.0269	6.4800e-003	0.0000	20.1888
Paving	9.0500e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0194	0.1019	0.1458	2.3000e-004		5.1000e-003	5.1000e-003		4.6900e-003	4.6900e-003	0.0000	20.0269	20.0269	6.4800e-003	0.0000	20.1888

First March Logistics (Building 1 Construction - Unmitigated) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.6 Paving - 2023****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	9.0000e-005	2.7400e-003	1.0900e-003	1.0000e-005	5.1000e-004	2.0000e-005	5.3000e-004	1.5000e-004	2.0000e-005	1.7000e-004	0.0000	1.3460	1.3460	1.0000e-005	2.0000e-004	1.4057	
Worker	4.9000e-004	3.6000e-004	4.7100e-003	1.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.2695	1.2695	3.0000e-005	3.0000e-005	1.2802	
Total	5.8000e-004	3.1000e-003	5.8000e-003	2.0000e-005	2.1600e-003	3.0000e-005	2.1900e-003	5.9000e-004	3.0000e-005	6.2000e-004	0.0000	2.6155	2.6155	4.0000e-005	2.3000e-004	2.6859	

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr										MT/yr						
Off-Road	0.0103	0.1019	0.1458	2.3000e-004			5.1000e-003	5.1000e-003		4.6900e-003	4.6900e-003	0.0000	20.0268	20.0268	6.4800e-003	0.0000	20.1888
Paving	9.0500e-003						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Total	0.0194	0.1019	0.1458	2.3000e-004			5.1000e-003	5.1000e-003		4.6900e-003	4.6900e-003	0.0000	20.0268	20.0268	6.4800e-003	0.0000	20.1888

First March Logistics (Building 1 Construction - Unmitigated) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.6 Paving - 2023****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	9.0000e-005	2.7400e-003	1.0900e-003	1.0000e-005	5.1000e-004	2.0000e-005	5.3000e-004	1.5000e-004	2.0000e-005	1.7000e-004	0.0000	1.3460	1.3460	1.0000e-005	2.0000e-004	1.4057	
Worker	4.9000e-004	3.6000e-004	4.7100e-003	1.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.2695	1.2695	3.0000e-005	3.0000e-005	1.2802	
Total	5.8000e-004	3.1000e-003	5.8000e-003	2.0000e-005	2.1600e-003	3.0000e-005	2.1900e-003	5.9000e-004	3.0000e-005	6.2000e-004	0.0000	2.6155	2.6155	4.0000e-005	2.3000e-004	2.6859	

4.0 Operational Detail - Mobile**4.1 Mitigation Measures Mobile**

First March Logistics (Building 1 Construction - Unmitigated) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated		Mitigated	
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00				
Manufacturing	0.00	0.00	0.00				
Other Asphalt Surfaces	0.00	0.00	0.00				
Parking Lot	0.00	0.00	0.00				
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00				
Total	0.00	0.00	0.00				

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
Manufacturing	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

First March Logistics (Building 1 Construction - Unmitigated) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468
Manufacturing	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468
Other Asphalt Surfaces	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468
Parking Lot	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468
Unrefrigerated Warehouse-No Rail	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

First March Logistics (Building 1 Construction - Unmitigated) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

First March Logistics (Building 1 Construction - Unmitigated) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Land Use	kBTU/yr	tons/yr										MT/yr						
City Park	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Manufacturing	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Parking Lot	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	

First March Logistics (Building 1 Construction - Unmitigated) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**5.3 Energy by Land Use - Electricity****Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Manufacturing	0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

First March Logistics (Building 1 Construction - Unmitigated) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**5.3 Energy by Land Use - Electricity****Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Manufacturing	0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

6.0 Area Detail**6.1 Mitigation Measures Area**

First March Logistics (Building 1 Construction - Unmitigated) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Mitigated	1.8605	1.1000e-004	0.0117	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0227	0.0227	6.0000e-005	0.0000	0.0242	
Unmitigated	1.8605	1.1000e-004	0.0117	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0227	0.0227	6.0000e-005	0.0000	0.0242	

6.2 Area by SubCategory**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
SubCategory	tons/yr											MT/yr					
Architectural Coating	0.2128					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Consumer Products	1.6467					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Landscaping	1.0800e-003	1.1000e-004	0.0117	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0227	0.0227	6.0000e-005	0.0000	0.0242	
Total	1.8605	1.1000e-004	0.0117	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0227	0.0227	6.0000e-005	0.0000	0.0242	

First March Logistics (Building 1 Construction - Unmitigated) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**6.2 Area by SubCategory****Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
SubCategory	tons/yr															MT/yr	
Architectural Coating	0.2128					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.6467					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0800e-003	1.1000e-004	0.0117	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0227	0.0227	6.0000e-005	0.0000	0.0242	
Total	1.8605	1.1000e-004	0.0117	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0227	0.0227	6.0000e-005	0.0000	0.0242	

7.0 Water Detail**7.1 Mitigation Measures Water**

First March Logistics (Building 1 Construction - Unmitigated) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use**Unmitigated**

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 0	0.0000	0.0000	0.0000	0.0000
Manufacturing	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

First March Logistics (Building 1 Construction - Unmitigated) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**7.2 Water by Land Use****Mitigated**

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 0	0.0000	0.0000	0.0000	0.0000
Manufacturing	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

8.0 Waste Detail**8.1 Mitigation Measures Waste**

First March Logistics (Building 1 Construction - Unmitigated) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**Category/Year**

	Total CO2	CH4	N2O	CO2e
MT/yr				
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

8.2 Waste by Land Use**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use tons MT/yr					
City Park	0	0.0000	0.0000	0.0000	0.0000
Manufacturing	0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

First March Logistics (Building 1 Construction - Unmitigated) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**8.2 Waste by Land Use****Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Manufacturing	0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

First March Logistics (Building 1 Construction - Unmitigated) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

User Defined Equipment

Equipment Type	Number
----------------	--------

11.0 Vegetation

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APPENDIX 4.2:

CALEEMOD PROJECT BUILDOUT (PHASE 2) CONSTRUCTION EMISSIONS MODEL OUTPUTS

First March Logistics (Building 2 Construction - Unmitigated) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**First March Logistics (Building 2 Construction - Unmitigated)**

Riverside-South Coast County, Annual

1.0 Project Characteristics**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	139.97	1000sqft	3.21	139,971.00	0
Other Asphalt Surfaces	84.93	1000sqft	1.95	84,926.00	0
Parking Lot	75.00	Space	0.46	20,026.00	0
City Park	0.78	Acre	0.78	33,787.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
Climate Zone	10			Operational Year	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Total Project Area (Building 2) is 6.40 acres

Construction Phase - Construction anticipated to end in 2024

Off-road Equipment - Hours are based on an 8-hour workday

Off-road Equipment - Crawler Tractors used in lieu of Tractors/Loaders/Backhoes

Off-road Equipment - Crawler Tractors used in lieu of Tractors/Loaders/Backhoes

Off-road Equipment -

Off-road Equipment - Crawler Tractors used in lieu of Tractors/Loaders/Backhoes

First March Logistics (Building 2 Construction - Unmitigated) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Trips and VMT - Vendor Trips adjusted based on CalEEMod defaults for Building Construction and number of days for Site Preparation, Grading, Building Construction, and Paving

Grading - Analysis conservatively assumes that 6 acres will be disturbed per day

Architectural Coating - PVCC SP MM Air 9

Vehicle Trips - Construction run only

Energy Use - Construction run only

Water And Wastewater - Construction run only

Solid Waste - Construction run only

Construction Off-road Equipment Mitigation - Rule 403

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	10.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	10.00
tblConstructionPhase	NumDays	20.00	40.00
tblEnergyUse	LightingElect	0.35	0.00
tblEnergyUse	LightingElect	1.17	0.00
tblEnergyUse	NT24E	0.82	0.00
tblEnergyUse	NT24NG	0.03	0.00
tblEnergyUse	T24E	0.33	0.00
tblEnergyUse	T24NG	1.98	0.00
tblGrading	AcresOfGrading	50.00	120.00
tblGrading	AcresOfGrading	35.00	60.00
tblLandUse	LandUseSquareFeet	30,000.00	20,026.00
tblLandUse	LandUseSquareFeet	33,976.80	33,787.00
tblLandUse	LotAcreage	0.68	0.46
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00

First March Logistics (Building 2 Construction - Unmitigated) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblOffRoadEquipment	UsageHours	7.00	8.00
tblSolidWaste	SolidWasteGenerationRate	0.07	0.00
tblSolidWaste	SolidWasteGenerationRate	131.57	0.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	3.00
tblTripsAndVMT	VendorTripNumber	46.00	38.00
tblTripsAndVMT	VendorTripNumber	0.00	3.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TTP	48.00	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CNW_TTP	41.00	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TTP	33.00	0.00
tblVehicleTrips	CW_TTP	59.00	0.00
tblVehicleTrips	DV_TP	28.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	6.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	66.00	0.00

First March Logistics (Building 2 Construction - Unmitigated) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleTrips	PR_TP	92.00	0.00
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	ST_TR	1.74	0.00
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	SU_TR	1.74	0.00
tblVehicleTrips	WD_TR	0.78	0.00
tblVehicleTrips	WD_TR	1.74	0.00
tblWater	IndoorWaterUseRate	32,368,062.50	0.00
tblWater	OutdoorWaterUseRate	929,355.45	0.00

2.0 Emissions Summary

First March Logistics (Building 2 Construction - Unmitigated) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**2.1 Overall Construction****Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.0474	0.5123	0.2582	7.8000e-004	0.2497	0.0208	0.2705	0.0940	0.0192	0.1132	0.0000	68.8838	68.8838	0.0211	2.1000e-004	69.4751
2024	0.4201	3.0931	2.6268	7.2200e-003	0.1816	0.1239	0.3055	0.0489	0.1156	0.1645	0.0000	641.9621	641.9621	0.1253	0.0136	649.1467
Maximum	0.4201	3.0931	2.6268	7.2200e-003	0.2497	0.1239	0.3055	0.0940	0.1156	0.1645	0.0000	641.9621	641.9621	0.1253	0.0136	649.1467

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.0474	0.5123	0.2582	7.8000e-004	0.0996	0.0208	0.1204	0.0373	0.0192	0.0564	0.0000	68.8837	68.8837	0.0211	2.1000e-004	69.4750
2024	0.4201	3.0931	2.6267	7.2200e-003	0.1816	0.1239	0.3055	0.0489	0.1156	0.1645	0.0000	641.9615	641.9615	0.1253	0.0136	649.1462
Maximum	0.4201	3.0931	2.6267	7.2200e-003	0.1816	0.1239	0.3055	0.0489	0.1156	0.1645	0.0000	641.9615	641.9615	0.1253	0.0136	649.1462

First March Logistics (Building 2 Construction - Unmitigated) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	34.79	0.00	26.05	39.73	0.00	20.45	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	11-17-2023	2-16-2024	1.0591	1.0591
2	2-17-2024	5-16-2024	0.9218	0.9218
3	5-17-2024	8-16-2024	0.9413	0.9413
4	8-17-2024	9-30-2024	0.4604	0.4604
		Highest	1.0591	1.0591

2.2 Overall Operational**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr													MT/yr		
Area	0.5796	3.0000e-005	3.8300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	7.4600e-003	7.4600e-003	2.0000e-005	0.0000	7.9500e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.5796	3.0000e-005	3.8300e-003	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	1.0000e-005	1.0000e-005	0.0000	7.4600e-003	7.4600e-003	2.0000e-005	0.0000	7.9500e-003

First March Logistics (Building 2 Construction - Unmitigated) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**2.2 Overall Operational****Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Area	0.5796	3.0000e-005	3.8300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	7.4600e-003	7.4600e-003	2.0000e-005	0.0000	7.9500e-003	
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Total	0.5796	3.0000e-005	3.8300e-003	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	1.0000e-005	1.0000e-005	0.0000	7.4600e-003	7.4600e-003	2.0000e-005	0.0000	7.9500e-003	

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	11/17/2023	11/30/2023	5	10	
2	Grading	Grading	12/1/2023	12/28/2023	5	20	
3	Building Construction	Building Construction	12/29/2023	11/14/2024	5	230	

First March Logistics (Building 2 Construction - Unmitigated) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4	Architectural Coating	Architectural Coating	10/18/2024	12/12/2024	5	40
5	Paving	Paving	11/15/2024	12/12/2024	5	20

Acres of Grading (Site Preparation Phase): 60**Acres of Grading (Grading Phase): 120****Acres of Paving: 2.41**

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 209,957; Non-Residential Outdoor: 69,986; Striped Parking Area: 6,297 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Crawler Tractors	4	8.00	212	0.43
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Grading	Crawler Tractors	3	8.00	212	0.43
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Crawler Tractors	3	8.00	212	0.43
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	8.00	78	0.48

First March Logistics (Building 2 Construction - Unmitigated) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	3.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	117.00	38.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	3.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	23.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Site Preparation - 2023**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1222	0.0000	0.1222	0.0531	0.0000	0.0531	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0192	0.2094	0.0915	2.8000e-004		8.7900e-003	8.7900e-003		8.0900e-003	8.0900e-003	0.0000	25.0115	25.0115	8.0900e-003	0.0000	25.2137
Total	0.0192	0.2094	0.0915	2.8000e-004	0.1222	8.7900e-003	0.1309	0.0531	8.0900e-003	0.0612	0.0000	25.0115	25.0115	8.0900e-003	0.0000	25.2137

First March Logistics (Building 2 Construction - Unmitigated) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.2 Site Preparation - 2023****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	1.0000e-005	3.4000e-004	1.4000e-004	0.0000	6.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.1683	0.1683	0.0000	2.0000e-005	0.1757	
Worker	2.9000e-004	2.2000e-004	2.8300e-003	1.0000e-005	9.9000e-004	0.0000	9.9000e-004	2.6000e-004	0.0000	2.7000e-004	0.0000	0.7617	0.7617	2.0000e-005	2.0000e-005	0.7681	
Total	3.0000e-004	5.6000e-004	2.9700e-003	1.0000e-005	1.0500e-003	0.0000	1.0600e-003	2.8000e-004	0.0000	2.9000e-004	0.0000	0.9300	0.9300	2.0000e-005	4.0000e-005	0.9438	

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0476	0.0000	0.0476	0.0207	0.0000	0.0207	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0192	0.2094	0.0915	2.8000e-004		8.7900e-003	8.7900e-003		8.0900e-003	8.0900e-003	0.0000	25.0115	25.0115	8.0900e-003	0.0000	25.2137
Total	0.0192	0.2094	0.0915	2.8000e-004	0.0476	8.7900e-003	0.0564	0.0207	8.0900e-003	0.0288	0.0000	25.0115	25.0115	8.0900e-003	0.0000	25.2137

First March Logistics (Building 2 Construction - Unmitigated) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.2 Site Preparation - 2023****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	1.0000e-005	3.4000e-004	1.4000e-004	0.0000	6.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.1683	0.1683	0.0000	2.0000e-005	0.1757	
Worker	2.9000e-004	2.2000e-004	2.8300e-003	1.0000e-005	9.9000e-004	0.0000	9.9000e-004	2.6000e-004	0.0000	2.7000e-004	0.0000	0.7617	0.7617	2.0000e-005	2.0000e-005	0.7681	
Total	3.0000e-004	5.6000e-004	2.9700e-003	1.0000e-005	1.0500e-003	0.0000	1.0600e-003	2.8000e-004	0.0000	2.9000e-004	0.0000	0.9300	0.9300	2.0000e-005	4.0000e-005	0.9438	

3.3 Grading - 2023**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1239	0.0000	0.1239	0.0400	0.0000	0.0400	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0259	0.2870	0.1479	4.4000e-004		0.0114	0.0114		0.0105	0.0105	0.0000	38.4898	38.4898	0.0125	0.0000	38.8010
Total	0.0259	0.2870	0.1479	4.4000e-004	0.1239	0.0114	0.1353	0.0400	0.0105	0.0505	0.0000	38.4898	38.4898	0.0125	0.0000	38.8010

First March Logistics (Building 2 Construction - Unmitigated) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.3 Grading - 2023****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	3.0000e-005	1.0300e-003	4.1000e-004	1.0000e-005	1.9000e-004	1.0000e-005	2.0000e-004	5.0000e-005	1.0000e-005	6.0000e-005	0.0000	0.5048	0.5048	1.0000e-005	7.0000e-005	0.5271	
Worker	4.9000e-004	3.6000e-004	4.7100e-003	1.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.2695	1.2695	3.0000e-005	3.0000e-005	1.2802	
Total	5.2000e-004	1.3900e-003	5.1200e-003	2.0000e-005	1.8400e-003	2.0000e-005	1.8600e-003	4.9000e-004	2.0000e-005	5.1000e-004	0.0000	1.7743	1.7743	4.0000e-005	1.0000e-004	1.8073	

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0483	0.0000	0.0483	0.0156	0.0000	0.0156	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0259	0.2870	0.1479	4.4000e-004		0.0114	0.0114		0.0105	0.0105	0.0000	38.4898	38.4898	0.0125	0.0000	38.8010
Total	0.0259	0.2870	0.1479	4.4000e-004	0.0483	0.0114	0.0597	0.0156	0.0105	0.0261	0.0000	38.4898	38.4898	0.0125	0.0000	38.8010

First March Logistics (Building 2 Construction - Unmitigated) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.3 Grading - 2023****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	3.0000e-005	1.0300e-003	4.1000e-004	1.0000e-005	1.9000e-004	1.0000e-005	2.0000e-004	5.0000e-005	1.0000e-005	6.0000e-005	0.0000	0.5048	0.5048	1.0000e-005	7.0000e-005	0.5271	
Worker	4.9000e-004	3.6000e-004	4.7100e-003	1.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.2695	1.2695	3.0000e-005	3.0000e-005	1.2802	
Total	5.2000e-004	1.3900e-003	5.1200e-003	2.0000e-005	1.8400e-003	2.0000e-005	1.8600e-003	4.9000e-004	2.0000e-005	5.1000e-004	0.0000	1.7743	1.7743	4.0000e-005	1.0000e-004	1.8073	

3.4 Building Construction - 2023**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.2800e-003	0.0131	8.6700e-003	2.0000e-005	5.6000e-004	5.6000e-004		5.2000e-004	5.2000e-004	0.0000	1.8635	1.8635	5.0000e-004	0.0000	1.8761	
Total	1.2800e-003	0.0131	8.6700e-003	2.0000e-005	5.6000e-004	5.6000e-004		5.2000e-004	5.2000e-004	0.0000	1.8635	1.8635	5.0000e-004	0.0000	1.8761	

First March Logistics (Building 2 Construction - Unmitigated) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.4 Building Construction - 2023****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	2.0000e-005	6.5000e-004	2.6000e-004	0.0000	1.2000e-004	1.0000e-005	1.3000e-004	3.0000e-005	1.0000e-005	4.0000e-005	0.0000	0.3197	0.3197	0.0000	5.0000e-005	0.3338	
Worker	1.9000e-004	1.4000e-004	1.8400e-003	1.0000e-005	6.4000e-004	0.0000	6.5000e-004	1.7000e-004	0.0000	1.7000e-004	0.0000	0.4951	0.4951	1.0000e-005	1.0000e-005	0.4993	
Total	2.1000e-004	7.9000e-004	2.1000e-003	1.0000e-005	7.6000e-004	1.0000e-005	7.8000e-004	2.0000e-004	1.0000e-005	2.1000e-004	0.0000	0.8148	0.8148	1.0000e-005	6.0000e-005	0.8331	

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.2800e-003	0.0131	8.6700e-003	2.0000e-005		5.6000e-004	5.6000e-004		5.2000e-004	5.2000e-004	0.0000	1.8635	1.8635	5.0000e-004	0.0000	1.8761
Total	1.2800e-003	0.0131	8.6700e-003	2.0000e-005		5.6000e-004	5.6000e-004		5.2000e-004	5.2000e-004	0.0000	1.8635	1.8635	5.0000e-004	0.0000	1.8761

First March Logistics (Building 2 Construction - Unmitigated) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.4 Building Construction - 2023****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	2.0000e-005	6.5000e-004	2.6000e-004	0.0000	1.2000e-004	1.0000e-005	1.3000e-004	3.0000e-005	1.0000e-005	4.0000e-005	0.0000	0.3197	0.3197	0.0000	5.0000e-005	0.3338	
Worker	1.9000e-004	1.4000e-004	1.8400e-003	1.0000e-005	6.4000e-004	0.0000	6.5000e-004	1.7000e-004	0.0000	1.7000e-004	0.0000	0.4951	0.4951	1.0000e-005	1.0000e-005	0.4993	
Total	2.1000e-004	7.9000e-004	2.1000e-003	1.0000e-005	7.6000e-004	1.0000e-005	7.8000e-004	2.0000e-004	1.0000e-005	2.1000e-004	0.0000	0.8148	0.8148	1.0000e-005	6.0000e-005	0.8331	

3.4 Building Construction - 2024**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2757	2.7852	1.9611	4.9200e-003		0.1156	0.1156		0.1078	0.1078	0.0000	426.8506	426.8506	0.1150	0.0000	429.7249
Total	0.2757	2.7852	1.9611	4.9200e-003		0.1156	0.1156		0.1078	0.1078	0.0000	426.8506	426.8506	0.1150	0.0000	429.7249

First March Logistics (Building 2 Construction - Unmitigated) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.4 Building Construction - 2024****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	4.6400e-003	0.1492	0.0588	7.5000e-004	0.0275	1.2300e-003	0.0287	7.9300e-003	1.1800e-003	9.1100e-003	0.0000	72.0781	72.0781	7.7000e-004	0.0106	75.2684	
Worker	0.0406	0.0287	0.3940	1.1800e-003	0.1472	6.7000e-004	0.1479	0.0391	6.2000e-004	0.0397	0.0000	110.6623	110.6623	2.5300e-003	2.7600e-003	111.5485	
Total	0.0452	0.1779	0.4527	1.9300e-003	0.1747	1.9000e-003	0.1766	0.0470	1.8000e-003	0.0488	0.0000	182.7403	182.7403	3.3000e-003	0.0134	186.8169	

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2757	2.7852	1.9611	4.9200e-003		0.1156	0.1156		0.1078	0.1078	0.0000	426.8501	426.8501	0.1150	0.0000	429.7244
Total	0.2757	2.7852	1.9611	4.9200e-003		0.1156	0.1156		0.1078	0.1078	0.0000	426.8501	426.8501	0.1150	0.0000	429.7244

First March Logistics (Building 2 Construction - Unmitigated) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.4 Building Construction - 2024****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	4.6400e-003	0.1492	0.0588	7.5000e-004	0.0275	1.2300e-003	0.0287	7.9300e-003	1.1800e-003	9.1100e-003	0.0000	72.0781	72.0781	7.7000e-004	0.0106	75.2684	
Worker	0.0406	0.0287	0.3940	1.1800e-003	0.1472	6.7000e-004	0.1479	0.0391	6.2000e-004	0.0397	0.0000	110.6623	110.6623	2.5300e-003	2.7600e-003	111.5485	
Total	0.0452	0.1779	0.4527	1.9300e-003	0.1747	1.9000e-003	0.1766	0.0470	1.8000e-003	0.0488	0.0000	182.7403	182.7403	3.3000e-003	0.0134	186.8169	

3.5 Architectural Coating - 2024**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0795					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.8200e-003	0.0325	0.0483	8.0000e-005		1.6200e-003	1.6200e-003		1.6200e-003	1.6200e-003	0.0000	6.8087	6.8087	3.8000e-004	0.0000	6.8183
Total	0.0843	0.0325	0.0483	8.0000e-005		1.6200e-003	1.6200e-003		1.6200e-003	1.6200e-003	0.0000	6.8087	6.8087	3.8000e-004	0.0000	6.8183

First March Logistics (Building 2 Construction - Unmitigated) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.5 Architectural Coating - 2024****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	1.3900e-003	9.9000e-004	0.0135	4.0000e-005	5.0600e-003	2.0000e-005	5.0800e-003	1.3400e-003	2.0000e-005	1.3600e-003	0.0000	3.7999	3.7999	9.0000e-005	9.0000e-005	3.8303	
Total	1.3900e-003	9.9000e-004	0.0135	4.0000e-005	5.0600e-003	2.0000e-005	5.0800e-003	1.3400e-003	2.0000e-005	1.3600e-003	0.0000	3.7999	3.7999	9.0000e-005	9.0000e-005	3.8303	

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0795					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.8200e-003	0.0325	0.0483	8.0000e-005		1.6200e-003	1.6200e-003		1.6200e-003	1.6200e-003	0.0000	6.8087	6.8087	3.8000e-004	0.0000	6.8183
Total	0.0843	0.0325	0.0483	8.0000e-005		1.6200e-003	1.6200e-003		1.6200e-003	1.6200e-003	0.0000	6.8087	6.8087	3.8000e-004	0.0000	6.8183

First March Logistics (Building 2 Construction - Unmitigated) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.5 Architectural Coating - 2024****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	1.3900e-003	9.9000e-004	0.0135	4.0000e-005	5.0600e-003	2.0000e-005	5.0800e-003	1.3400e-003	2.0000e-005	1.3600e-003	0.0000	3.7999	3.7999	9.0000e-005	9.0000e-005	3.8303	
Total	1.3900e-003	9.9000e-004	0.0135	4.0000e-005	5.0600e-003	2.0000e-005	5.0800e-003	1.3400e-003	2.0000e-005	1.3600e-003	0.0000	3.7999	3.7999	9.0000e-005	9.0000e-005	3.8303	

3.6 Paving - 2024**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.8800e-003	0.0953	0.1463	2.3000e-004		4.6900e-003	4.6900e-003		4.3100e-003	4.3100e-003	0.0000	20.0265	20.0265	6.4800e-003	0.0000	20.1885
Paving	3.1600e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0130	0.0953	0.1463	2.3000e-004		4.6900e-003	4.6900e-003		4.3100e-003	4.3100e-003	0.0000	20.0265	20.0265	6.4800e-003	0.0000	20.1885

First March Logistics (Building 2 Construction - Unmitigated) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.6 Paving - 2024****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	3.0000e-005	1.0300e-003	4.1000e-004	1.0000e-005	1.9000e-004	1.0000e-005	2.0000e-004	5.0000e-005	1.0000e-005	6.0000e-005	0.0000	0.4970	0.4970	1.0000e-005	7.0000e-005	0.5190	
Worker	4.5000e-004	3.2000e-004	4.4100e-003	1.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.4000e-004	0.0000	1.2391	1.2391	3.0000e-005	3.0000e-005	1.2490	
Total	4.8000e-004	1.3500e-003	4.8200e-003	2.0000e-005	1.8400e-003	2.0000e-005	1.8600e-003	4.9000e-004	2.0000e-005	5.0000e-004	0.0000	1.7361	1.7361	4.0000e-005	1.0000e-004	1.7680	

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr										MT/yr						
Off-Road	9.8800e-003	0.0953	0.1463	2.3000e-004			4.6900e-003	4.6900e-003		4.3100e-003	4.3100e-003	0.0000	20.0265	20.0265	6.4800e-003	0.0000	20.1884
Paving	3.1600e-003						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Total	0.0130	0.0953	0.1463	2.3000e-004			4.6900e-003	4.6900e-003		4.3100e-003	4.3100e-003	0.0000	20.0265	20.0265	6.4800e-003	0.0000	20.1884

First March Logistics (Building 2 Construction - Unmitigated) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.6 Paving - 2024****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	3.0000e-005	1.0300e-003	4.1000e-004	1.0000e-005	1.9000e-004	1.0000e-005	2.0000e-004	5.0000e-005	1.0000e-005	6.0000e-005	0.0000	0.4970	0.4970	1.0000e-005	7.0000e-005	0.5190	
Worker	4.5000e-004	3.2000e-004	4.4100e-003	1.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.4000e-004	0.0000	1.2391	1.2391	3.0000e-005	3.0000e-005	1.2490	
Total	4.8000e-004	1.3500e-003	4.8200e-003	2.0000e-005	1.8400e-003	2.0000e-005	1.8600e-003	4.9000e-004	2.0000e-005	5.0000e-004	0.0000	1.7361	1.7361	4.0000e-005	1.0000e-004	1.7680	

4.0 Operational Detail - Mobile**4.1 Mitigation Measures Mobile**

First March Logistics (Building 2 Construction - Unmitigated) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

First March Logistics (Building 2 Construction - Unmitigated) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.537845	0.056225	0.173186	0.138405	0.025906	0.007191	0.011447	0.018769	0.000611	0.000309	0.023821	0.001097	0.005189
Other Asphalt Surfaces	0.537845	0.056225	0.173186	0.138405	0.025906	0.007191	0.011447	0.018769	0.000611	0.000309	0.023821	0.001097	0.005189
Parking Lot	0.537845	0.056225	0.173186	0.138405	0.025906	0.007191	0.011447	0.018769	0.000611	0.000309	0.023821	0.001097	0.005189
Unrefrigerated Warehouse-No Rail	0.537845	0.056225	0.173186	0.138405	0.025906	0.007191	0.011447	0.018769	0.000611	0.000309	0.023821	0.001097	0.005189

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

First March Logistics (Building 2 Construction - Unmitigated) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

First March Logistics (Building 2 Construction - Unmitigated) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

First March Logistics (Building 2 Construction - Unmitigated) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

First March Logistics (Building 2 Construction - Unmitigated) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**5.3 Energy by Land Use - Electricity****Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

6.0 Area Detail**6.1 Mitigation Measures Area**

First March Logistics (Building 2 Construction - Unmitigated) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Mitigated	0.5796	3.0000e-005	3.8300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	7.4600e-003	7.4600e-003	2.0000e-005	0.0000	7.9500e-003	
Unmitigated	0.5796	3.0000e-005	3.8300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	7.4600e-003	7.4600e-003	2.0000e-005	0.0000	7.9500e-003	

6.2 Area by SubCategoryUnmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
SubCategory	tons/yr											MT/yr					
Architectural Coating	0.0663					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Consumer Products	0.5129					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Landscaping	3.5000e-004	3.0000e-005	3.8300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	7.4600e-003	7.4600e-003	2.0000e-005	0.0000	7.9500e-003	
Total	0.5796	3.0000e-005	3.8300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	7.4600e-003	7.4600e-003	2.0000e-005	0.0000	7.9500e-003	

First March Logistics (Building 2 Construction - Unmitigated) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**6.2 Area by SubCategory****Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0663					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.5129					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.5000e-004	3.0000e-005	3.8300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	7.4600e-003	7.4600e-003	2.0000e-005	0.0000	7.9500e-003
Total	0.5796	3.0000e-005	3.8300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	7.4600e-003	7.4600e-003	2.0000e-005	0.0000	7.9500e-003

7.0 Water Detail**7.1 Mitigation Measures Water**

First March Logistics (Building 2 Construction - Unmitigated) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use**Unmitigated**

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

First March Logistics (Building 2 Construction - Unmitigated) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**7.2 Water by Land Use****Mitigated**

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

8.0 Waste Detail**8.1 Mitigation Measures Waste**

First March Logistics (Building 2 Construction - Unmitigated) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**Category/Year**

	Total CO2	CH4	N2O	CO2e
MT/yr				
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

8.2 Waste by Land Use**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use tons MT/yr					
City Park	0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

First March Logistics (Building 2 Construction - Unmitigated) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**8.2 Waste by Land Use****Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

First March Logistics (Building 2 Construction - Unmitigated) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Equipment Type	Number
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11.0 Vegetation

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APPENDIX 4.3:

CALEEMOD BUILDING 1 (PHASE 1) OPERATIONAL EMISSIONS MODEL OUTPUTS

First March Logistics (Building 1 Operations - High-Cube Fulfillment Center) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**First March Logistics (Building 1 Operations - High-Cube Fulfillment Center)**

Riverside-South Coast County, Annual

1.0 Project Characteristics**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	350.00	1000sqft	8.03	350,000.00	0
User Defined Industrial	350.00	User Defined Unit	0.00	0.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
Climate Zone	10			Operational Year	2023
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Operations run only

Off-road Equipment - Operations run only

Vehicle Trips - Trip characteristics based on information provided in the Traffic Analysis

Fleet Mix - Passenger Car Mix estimated based on the CalEEMod default fleet mix and the ratio of the vehicle classes (LDA, LDT1, LDT2, MDV, & MCY). Truck Mix based on information in the Traffic Analysis

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	0.00
tblConstructionPhase	PhaseEndDate	7/28/2022	6/30/2022
tblFleetMix	HHD	0.02	0.00

First March Logistics (Building 1 Operations - High-Cube Fulfillment Center) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblFleetMix	HHD	0.02	0.78
tblFleetMix	LDA	0.53	0.58
tblFleetMix	LDA	0.53	0.00
tblFleetMix	LDT1	0.06	0.06
tblFleetMix	LDT1	0.06	0.00
tblFleetMix	LDT2	0.17	0.19
tblFleetMix	LDT2	0.17	0.00
tblFleetMix	LHD1	0.03	0.00
tblFleetMix	LHD1	0.03	0.09
tblFleetMix	LHD2	7.3100e-003	0.00
tblFleetMix	LHD2	7.3100e-003	0.02
tblFleetMix	MCY	0.02	0.03
tblFleetMix	MCY	0.02	0.00
tblFleetMix	MDV	0.14	0.15
tblFleetMix	MDV	0.14	0.00
tblFleetMix	MH	5.4680e-003	0.00
tblFleetMix	MH	5.4680e-003	0.00
tblFleetMix	MHD	0.01	0.00
tblFleetMix	MHD	0.01	0.11
tblFleetMix	OBUS	6.1600e-004	0.00
tblFleetMix	OBUS	6.1600e-004	0.00
tblFleetMix	SBUS	1.1000e-003	0.00
tblFleetMix	SBUS	1.1000e-003	0.00
tblFleetMix	UBUS	3.1500e-004	0.00
tblFleetMix	UBUS	3.1500e-004	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblVehicleTrips	CW_TL	16.60	40.00

First March Logistics (Building 1 Operations - High-Cube Fulfillment Center) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleTrips	CW_TTP	0.00	100.00
tblVehicleTrips	PR_TP	0.00	100.00
tblVehicleTrips	ST_TR	1.74	0.15
tblVehicleTrips	ST_TR	0.00	0.03
tblVehicleTrips	SU_TR	1.74	0.06
tblVehicleTrips	SU_TR	0.00	0.01
tblVehicleTrips	WD_TR	1.74	1.75
tblVehicleTrips	WD_TR	0.00	0.38

2.0 Emissions Summary

First March Logistics (Building 1 Operations - High-Cube Fulfillment Center) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction

Unmitigated Construction

Mitigated Construction

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
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First March Logistics (Building 1 Operations - High-Cube Fulfillment Center) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

		Highest		
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2.2 Overall Operational**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr										MT/yr						
Area	1.4278	8.0000e-005	8.9300e-003	0.0000		3.0000e-005	3.0000e-005	3.0000e-005	3.0000e-005	0.0000	0.0174	0.0174	5.0000e-005	0.0000	0.0185		
Energy	3.7900e-003	0.0345	0.0290	2.1000e-004		2.6200e-003	2.6200e-003	2.6200e-003	2.6200e-003	0.0000	181.5460	181.5460	0.0129	2.1600e-003	182.5120		
Mobile	0.3179	3.2373	3.6233	0.0235	1.3386	0.0399	1.3785	0.3633	0.0381	0.4014	0.0000	2,245.2889	2,245.2889	0.0516	0.2707	2,327.2562	
Waste						0.0000	0.0000		0.0000	0.0000	66.7840	0.0000	66.7840	3.9468	0.0000	165.4546	
Water						0.0000	0.0000		0.0000	0.0000	25.6777	186.9022	212.5799	2.6531	0.0642	298.0354	
Total	1.7495	3.2719	3.6612	0.0237	1.3386	0.0426	1.3812	0.3633	0.0407	0.4040	92.4618	2,613.7545	2,706.2162	6.6645	0.3371	2,973.2767	

First March Logistics (Building 1 Operations - High-Cube Fulfillment Center) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**2.2 Overall Operational****Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Area	1.4278	8.0000e-005	8.9300e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0174	0.0174	5.0000e-005	0.0000	0.0185	
Energy	3.7900e-003	0.0345	0.0290	2.1000e-004		2.6200e-003	2.6200e-003		2.6200e-003	2.6200e-003	0.0000	181.5460	181.5460	0.0129	2.1600e-003	182.5120	
Mobile	0.3179	3.2373	3.6233	0.0235	1.3386	0.0399	1.3785	0.3633	0.0381	0.4014	0.0000	2,245.2889	2,245.2889	0.0516	0.2707	2,327.2562	
Waste						0.0000	0.0000		0.0000	0.0000	66.7840	0.0000	66.7840	3.9468	0.0000	165.4546	
Water						0.0000	0.0000		0.0000	0.0000	25.6777	186.9022	212.5799	2.6531	0.0642	298.0354	
Total	1.7495	3.2719	3.6612	0.0237	1.3386	0.0426	1.3812	0.3633	0.0407	0.4040	92.4618	2,613.7545	2,706.2162	6.6645	0.3371	2,973.2767	

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	7/1/2022	6/30/2022	5	0	

Acres of Grading (Site Preparation Phase): 0

First March Logistics (Building 1 Operations - High-Cube Fulfillment Center) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Excavators	0	8.00	158	0.38
Demolition	Rubber Tired Dozers	0	8.00	247	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

First March Logistics (Building 1 Operations - High-Cube Fulfillment Center) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2022

Unmitigated Construction On-Site

Unmitigated Construction Off-Site

First March Logistics (Building 1 Operations - High-Cube Fulfillment Center) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.2 Demolition - 2022****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000							

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000							

First March Logistics (Building 1 Operations - High-Cube Fulfillment Center) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**4.1 Mitigation Measures Mobile**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Mitigated	0.3179	3.2373	3.6233	0.0235	1.3386	0.0399	1.3785	0.3633	0.0381	0.4014	0.0000	2,245.288	2,245.288	0.0516	0.2707	2,327.256	
Unmitigated	0.3179	3.2373	3.6233	0.0235	1.3386	0.0399	1.3785	0.3633	0.0381	0.4014	0.0000	2,245.288	2,245.288	0.0516	0.2707	2,327.256	

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated		Mitigated	
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT	Annual VMT	Annual VMT
Unrefrigerated Warehouse-No Rail	614.01	52.40	20.97	1,924,523	1,924,523	1,924,523	1,924,523
User Defined Industrial	134.02	11.45	4.59	1,427,098	1,427,098	1,427,098	1,427,098
Total	748.02	63.84	25.55	3,351,621	3,351,621	3,351,621	3,351,621

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Unrefrigerated Warehouse-No Rail	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3
User Defined Industrial	40.00	8.40	6.90	100.00	0.00	0.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Unrefrigerated Warehouse-No Rail	0.576000	0.060300	0.185900	0.151900	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.025900	0.000000	0.000000

First March Logistics (Building 1 Operations - High-Cube Fulfillment Center) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

User Defined Industrial	0.000000	0.000000	0.000000	0.000000	0.087200	0.024000	0.111000	0.777800	0.000000	0.000000	0.000000	0.000000	0.000000
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5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	144.0046	144.0046	0.0122	1.4700e-003	144.7475
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	144.0046	144.0046	0.0122	1.4700e-003	144.7475
NaturalGas Mitigated	3.7900e-003	0.0345	0.0290	2.1000e-004		2.6200e-003	2.6200e-003	2.6200e-003	2.6200e-003	0.0000	37.5414	37.5414	7.2000e-004	6.9000e-004	37.7645	
NaturalGas Unmitigated	3.7900e-003	0.0345	0.0290	2.1000e-004		2.6200e-003	2.6200e-003	2.6200e-003	2.6200e-003	0.0000	37.5414	37.5414	7.2000e-004	6.9000e-004	37.7645	

First March Logistics (Building 1 Operations - High-Cube Fulfillment Center) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**5.2 Energy by Land Use - NaturalGas****Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Unrefrigerated Warehouse-No Rail	703500	3.7900e-003	0.0345	0.0290	2.1000e-004		2.6200e-003	2.6200e-003		2.6200e-003	2.6200e-003	0.0000	37.5414	37.5414	7.2000e-004	6.9000e-004	37.7645
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		3.7900e-003	0.0345	0.0290	2.1000e-004		2.6200e-003	2.6200e-003		2.6200e-003	2.6200e-003	0.0000	37.5414	37.5414	7.2000e-004	6.9000e-004	37.7645

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Unrefrigerated Warehouse-No Rail	703500	3.7900e-003	0.0345	0.0290	2.1000e-004		2.6200e-003	2.6200e-003		2.6200e-003	2.6200e-003	0.0000	37.5414	37.5414	7.2000e-004	6.9000e-004	37.7645
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		3.7900e-003	0.0345	0.0290	2.1000e-004		2.6200e-003	2.6200e-003		2.6200e-003	2.6200e-003	0.0000	37.5414	37.5414	7.2000e-004	6.9000e-004	37.7645

First March Logistics (Building 1 Operations - High-Cube Fulfillment Center) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**5.3 Energy by Land Use - Electricity****Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Unrefrigerated Warehouse-No Rail	812000	144.0046	0.0122	1.4700e-003	144.7475
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		144.0046	0.0122	1.4700e-003	144.7475

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Unrefrigerated Warehouse-No Rail	812000	144.0046	0.0122	1.4700e-003	144.7475
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		144.0046	0.0122	1.4700e-003	144.7475

6.0 Area Detail

First March Logistics (Building 1 Operations - High-Cube Fulfillment Center) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**6.1 Mitigation Measures Area**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr												MT/yr				
Mitigated	1.4278	8.0000e-005	8.9300e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0174	0.0174	5.0000e-005	0.0000	0.0185	
Unmitigated	1.4278	8.0000e-005	8.9300e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0174	0.0174	5.0000e-005	0.0000	0.0185	

6.2 Area by SubCategory**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
SubCategory	tons/yr												MT/yr				
Architectural Coating	0.1622					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Consumer Products	1.2647					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Landscaping	8.3000e-004	8.0000e-005	8.9300e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0174	0.0174	5.0000e-005	0.0000	0.0185	
Total	1.4278	8.0000e-005	8.9300e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0174	0.0174	5.0000e-005	0.0000	0.0185	

First March Logistics (Building 1 Operations - High-Cube Fulfillment Center) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**6.2 Area by SubCategory****Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
SubCategory	tons/yr															MT/yr	
Architectural Coating	0.1622					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.2647					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	8.3000e-004	8.0000e-005	8.9300e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0174	0.0174	5.0000e-005	0.0000	0.0185	
Total	1.4278	8.0000e-005	8.9300e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0174	0.0174	5.0000e-005	0.0000	0.0185	

7.0 Water Detail**7.1 Mitigation Measures Water**

First March Logistics (Building 1 Operations - High-Cube Fulfillment Center) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	212.5799	2.6531	0.0642	298.0354
Unmitigated	212.5799	2.6531	0.0642	298.0354

7.2 Water by Land Use**Unmitigated**

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Unrefrigerated Warehouse-No Rail	80.9375 / 0	212.5799	2.6531	0.0642	298.0354
User Defined Industrial	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		212.5799	2.6531	0.0642	298.0354

First March Logistics (Building 1 Operations - High-Cube Fulfillment Center) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**7.2 Water by Land Use****Mitigated**

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Unrefrigerated Warehouse-No Rail	80.9375 / 0	212.5799	2.6531	0.0642	298.0354
User Defined Industrial	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		212.5799	2.6531	0.0642	298.0354

8.0 Waste Detail**8.1 Mitigation Measures Waste****Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	66.7840	3.9468	0.0000	165.4546
Unmitigated	66.7840	3.9468	0.0000	165.4546

First March Logistics (Building 1 Operations - High-Cube Fulfillment Center) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**8.2 Waste by Land Use****Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Unrefrigerated Warehouse-No Rail	329	66.7840	3.9468	0.0000	165.4546
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		66.7840	3.9468	0.0000	165.4546

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Unrefrigerated Warehouse-No Rail	329	66.7840	3.9468	0.0000	165.4546
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		66.7840	3.9468	0.0000	165.4546

9.0 Operational Offroad

First March Logistics (Building 1 Operations - High-Cube Fulfillment Center) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

First March Logistics (Building 1 Operations - Manufacturing) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**First March Logistics (Building 1 Operations - Manufacturing)**

Riverside-South Coast County, Annual

1.0 Project Characteristics**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Manufacturing	100.00	1000sqft	2.30	100,000.00	0
Parking Lot	262.00	Space	2.34	102,031.00	0
City Park	2.75	Acre	2.75	119,841.00	0
Other Asphalt Surfaces	198.94	1000sqft	4.57	198,942.00	0
User Defined Industrial	100.00	User Defined Unit	0.00	0.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
Climate Zone	10			Operational Year	2023
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Total Project Area (Building 1 without High-Cube Fulfillment Center) is 11.96 acres

Construction Phase - Operations run only

Off-road Equipment - Operations run only

Vehicle Trips - Trip characteristics based on information provided in the Traffic Analysis

Fleet Mix - Passenger Car Mix estimated based on the CalEEMod default fleet mix and the ratio of the vehicle classes (LDA, LDT1, LDT2, MDV, & MCY). Truck Mix based on information in the Traffic Analysis

Operational Off-Road Equipment - Based on SCAQMD High Cube Warehouse Truck Trip Study White Paper Summary of Business Survey Results (2014)

First March Logistics (Building 1 Operations - Manufacturing) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	0.00
tblConstructionPhase	PhaseEndDate	7/28/2022	6/30/2022
tblFleetMix	HHD	0.02	0.00
tblFleetMix	HHD	0.02	0.62
tblFleetMix	LDA	0.53	0.58
tblFleetMix	LDA	0.53	0.00
tblFleetMix	LDT1	0.06	0.06
tblFleetMix	LDT1	0.06	0.00
tblFleetMix	LDT2	0.17	0.19
tblFleetMix	LDT2	0.17	0.00
tblFleetMix	LHD1	0.03	0.00
tblFleetMix	LHD1	0.03	0.15
tblFleetMix	LHD2	7.3100e-003	0.00
tblFleetMix	LHD2	7.3100e-003	0.04
tblFleetMix	MCY	0.02	0.03
tblFleetMix	MCY	0.02	0.00
tblFleetMix	MDV	0.14	0.15
tblFleetMix	MDV	0.14	0.00
tblFleetMix	MH	5.4680e-003	0.00
tblFleetMix	MH	5.4680e-003	0.00
tblFleetMix	MHD	0.01	0.00
tblFleetMix	MHD	0.01	0.19
tblFleetMix	OBUS	6.1600e-004	0.00
tblFleetMix	OBUS	6.1600e-004	0.00
tblFleetMix	SBUS	1.1000e-003	0.00
tblFleetMix	SBUS	1.1000e-003	0.00
tblFleetMix	UBUS	3.1500e-004	0.00
tblFleetMix	UBUS	3.1500e-004	0.00

First March Logistics (Building 1 Operations - Manufacturing) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblLandUse	LandUseSquareFees	104,800.00	102,031.00
tblLandUse	LandUseSquareFees	119,790.00	119,841.00
tblLandUse	LotAcreage	2.36	2.34
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	365.00
tblOperationalOffRoadEquipment	OperFuelType	Diesel	CNG
tblOperationalOffRoadEquipment	OperHorsePower	97.00	200.00
tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	4.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	2.00
tblVehicleTrips	CC_TTP	48.00	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TL	16.60	40.00
tblVehicleTrips	CW_TTP	33.00	0.00
tblVehicleTrips	CW_TTP	0.00	100.00
tblVehicleTrips	DV_TP	28.00	0.00
tblVehicleTrips	PB_TP	6.00	0.00
tblVehicleTrips	PR_TP	66.00	0.00
tblVehicleTrips	PR_TP	0.00	100.00
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	ST_TR	6.42	5.74
tblVehicleTrips	ST_TR	0.00	0.68
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	SU_TR	5.09	4.55
tblVehicleTrips	SU_TR	0.00	0.54
tblVehicleTrips	WD_TR	0.78	0.00
tblVehicleTrips	WD_TR	3.93	3.54
tblVehicleTrips	WD_TR	0.00	0.42

First March Logistics (Building 1 Operations - Manufacturing) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

Mitigated Construction

First March Logistics (Building 1 Operations - Manufacturing) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)						Maximum Mitigated ROG + NOX (tons/quarter)							
		Highest														

2.2 Overall OperationalUnmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.4333	8.0000e-005	8.4700e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0165	0.0165	4.0000e-005	0.0000	0.0176
Energy	0.0174	0.1585	0.1331	9.5000e-004		0.0120	0.0120		0.0120	0.0120	0.0000	354.7851	354.7851	0.0187	5.0300e-003	356.7506
Mobile	0.2656	1.5359	3.0353	0.0135	0.9630	0.0187	0.9816	0.2603	0.0178	0.2780	0.0000	1,277.5743	1,277.5743	0.0364	0.1259	1,315.9913
Offroad	0.0403	0.3782	0.2735	1.1600e-003		0.0137	0.0137		0.0126	0.0126	0.0000	101.5038	101.5038	0.0328	0.0000	102.3246
Waste						0.0000	0.0000		0.0000	0.0000	25.2196	0.0000	25.2196	1.4904	0.0000	62.4805
Water						0.0000	0.0000		0.0000	0.0000	7.3365	59.8565	67.1930	0.7586	0.0184	91.6421
Total	0.7566	2.0726	3.4504	0.0156	0.9630	0.0445	1.0074	0.2603	0.0425	0.3027	32.5561	1,793.7363	1,826.2924	2.3370	0.1493	1,929.2066

First March Logistics (Building 1 Operations - Manufacturing) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**2.2 Overall Operational****Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Area	0.4333	8.0000e-005	8.4700e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0165	0.0165	4.0000e-005	0.0000	0.0176	
Energy	0.0174	0.1585	0.1331	9.5000e-004		0.0120	0.0120		0.0120	0.0120	0.0000	354.7851	354.7851	0.0187	5.0300e-003	356.7506	
Mobile	0.2656	1.5359	3.0353	0.0135	0.9630	0.0187	0.9816	0.2603	0.0178	0.2780	0.0000	1,277.5743	1,277.5743	0.0364	0.1259	1,315.9913	
Offroad	0.0403	0.3782	0.2735	1.1600e-003		0.0137	0.0137		0.0126	0.0126	0.0000	101.5038	101.5038	0.0328	0.0000	102.3246	
Waste						0.0000	0.0000		0.0000	0.0000	25.2196	0.0000	25.2196	1.4904	0.0000	62.4805	
Water						0.0000	0.0000		0.0000	0.0000	7.3365	59.8565	67.1930	0.7586	0.0184	91.6421	
Total	0.7566	2.0726	3.4504	0.0156	0.9630	0.0445	1.0074	0.2603	0.0425	0.3027	32.5561	1,793.7363	1,826.2924	2.3370	0.1493	1,929.2066	

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	7/1/2022	6/30/2022	5	0	

First March Logistics (Building 1 Operations - Manufacturing) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**Acres of Grading (Site Preparation Phase): 0****Acres of Grading (Grading Phase): 0****Acres of Paving: 6.91****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Excavators	0	8.00	158	0.38
Demolition	Rubber Tired Dozers	0	8.00	247	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

First March Logistics (Building 1 Operations - Manufacturing) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2022

Unmitigated Construction On-Site

Unmitigated Construction Off-Site

First March Logistics (Building 1 Operations - Manufacturing) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.2 Demolition - 2022****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000							

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000							

First March Logistics (Building 1 Operations - Manufacturing) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**4.1 Mitigation Measures Mobile**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Mitigated	0.2656	1.5359	3.0353	0.0135	0.9630	0.0187	0.9816	0.2603	0.0178	0.2780	0.0000	1,277.574	1,277.574	0.0364	0.1259	1,315.991	
Unmitigated	0.2656	1.5359	3.0353	0.0135	0.9630	0.0187	0.9816	0.2603	0.0178	0.2780	0.0000	1,277.574	1,277.574	0.0364	0.1259	1,315.991	

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated		Mitigated	
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00				
Manufacturing	354.00	573.91	455.02	1,770,634		1,770,634	
Other Asphalt Surfaces	0.00	0.00	0.00				
Parking Lot	0.00	0.00	0.00				
User Defined Industrial	42.00	68.09	53.98	690,706		690,706	
Total	396.00	642.00	509.00	2,461,340		2,461,340	

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Manufacturing	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

First March Logistics (Building 1 Operations - Manufacturing) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
User Defined Industrial	40.00	8.40	6.90	100.00	0.00	0.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468
Manufacturing	0.576000	0.060300	0.185900	0.151900	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.025900	0.000000	0.000000
Other Asphalt Surfaces	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468
Parking Lot	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468
User Defined Industrial	0.000000	0.000000	0.000000	0.000000	0.149400	0.041100	0.190500	0.619000	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

First March Logistics (Building 1 Operations - Manufacturing) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000	0.0000	0.0000	0.0000	182.2599	182.2599	0.0154	1.8600e-003		183.2002
Electricity Unmitigated						0.0000	0.0000	0.0000	0.0000	0.0000	182.2599	182.2599	0.0154	1.8600e-003		183.2002
NaturalGas Mitigated	0.0174	0.1585	0.1331	9.5000e-004		0.0120	0.0120	0.0120	0.0120	0.0000	172.5252	172.5252	3.3100e-003	3.1600e-003		173.5504
NaturalGas Unmitigated	0.0174	0.1585	0.1331	9.5000e-004		0.0120	0.0120	0.0120	0.0120	0.0000	172.5252	172.5252	3.3100e-003	3.1600e-003		173.5504

First March Logistics (Building 1 Operations - Manufacturing) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**5.2 Energy by Land Use - NaturalGas****Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Manufacturing	3.233e+006	0.0174	0.1585	0.1331	9.5000e-004		0.0120	0.0120		0.0120	0.0120	0.0000	172.5252	172.5252	3.3100e-003	3.1600e-003	173.5504
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0174	0.1585	0.1331	9.5000e-004		0.0120	0.0120		0.0120	0.0120	0.0000	172.5252	172.5252	3.3100e-003	3.1600e-003	173.5504

First March Logistics (Building 1 Operations - Manufacturing) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**5.2 Energy by Land Use - NaturalGas****Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Manufacturing	3.233e+006	0.0174	0.1585	0.1331	9.5000e-004		0.0120	0.0120		0.0120	0.0120	0.0000	172.5252	172.5252	3.3100e-003	3.1600e-003	173.5504
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0174	0.1585	0.1331	9.5000e-004		0.0120	0.0120		0.0120	0.0120	0.0000	172.5252	172.5252	3.3100e-003	3.1600e-003	173.5504

First March Logistics (Building 1 Operations - Manufacturing) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**5.3 Energy by Land Use - Electricity****Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Manufacturing	992000	175.9268	0.0149	1.8000e-003	176.8344
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	35710.8	6.3332	5.3000e-004	6.0000e-005	6.3658
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		182.2599	0.0154	1.8600e-003	183.2002

First March Logistics (Building 1 Operations - Manufacturing) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**5.3 Energy by Land Use - Electricity****Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Manufacturing	992000	175.9268	0.0149	1.8000e-003	176.8344
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	35710.8	6.3332	5.3000e-004	6.0000e-005	6.3658
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		182.2599	0.0154	1.8600e-003	183.2002

6.0 Area Detail**6.1 Mitigation Measures Area**

First March Logistics (Building 1 Operations - Manufacturing) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Mitigated	0.4333	8.0000e-005	8.4700e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0165	0.0165	4.0000e-005	0.0000	0.0176	
Unmitigated	0.4333	8.0000e-005	8.4700e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0165	0.0165	4.0000e-005	0.0000	0.0176	

6.2 Area by SubCategoryUnmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
SubCategory	tons/yr											MT/yr					
Architectural Coating	0.0505					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Consumer Products	0.3819					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Landscaping	7.8000e-004	8.0000e-005	8.4700e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0165	0.0165	4.0000e-005	0.0000	0.0176	
Total	0.4332	8.0000e-005	8.4700e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0165	0.0165	4.0000e-005	0.0000	0.0176	

First March Logistics (Building 1 Operations - Manufacturing) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**6.2 Area by SubCategory****Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr												MT/yr			
Architectural Coating	0.0505					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3819					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	7.8000e-004	8.0000e-005	8.4700e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0165	0.0165	4.0000e-005	0.0000	0.0176
Total	0.4332	8.0000e-005	8.4700e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0165	0.0165	4.0000e-005	0.0000	0.0176

7.0 Water Detail**7.1 Mitigation Measures Water**

First March Logistics (Building 1 Operations - Manufacturing) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	67.1930	0.7586	0.0184	91.6421
Unmitigated	67.1930	0.7586	0.0184	91.6421

7.2 Water by Land Use**Unmitigated**

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 3.27657	6.4559	5.4000e-004	7.0000e-005	6.4892
Manufacturing	23.125 / 0	60.7371	0.7580	0.0183	85.1530
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
User Defined Industrial	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		67.1930	0.7586	0.0184	91.6421

First March Logistics (Building 1 Operations - Manufacturing) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**7.2 Water by Land Use****Mitigated**

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 3.27657	6.4559	5.4000e- 004	7.0000e- 005	6.4892
Manufacturing	23.125 / 0	60.7371	0.7580	0.0183	85.1530
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
User Defined Industrial	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		67.1930	0.7586	0.0184	91.6421

8.0 Waste Detail**8.1 Mitigation Measures Waste**

First March Logistics (Building 1 Operations - Manufacturing) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**Category/Year**

	Total CO2	CH4	N2O	CO2e
MT/yr				
Mitigated	25.2196	1.4904	0.0000	62.4805
Unmitigated	25.2196	1.4904	0.0000	62.4805

8.2 Waste by Land Use**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use tons MT/yr					
City Park	0.24	0.0487	2.8800e-003	0.0000	0.1207
Manufacturing	124	25.1709	1.4876	0.0000	62.3598
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		25.2196	1.4904	0.0000	62.4805

First March Logistics (Building 1 Operations - Manufacturing) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**8.2 Waste by Land Use****Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.24	0.0487	2.8800e-003	0.0000	0.1207
Manufacturing	124	25.1709	1.4876	0.0000	62.3598
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		25.2196	1.4904	0.0000	62.4805

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Tractors/Loaders/Backhoes	2	4.00	365	200	0.37	CNG

First March Logistics (Building 1 Operations - Manufacturing) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**UnMitigated/Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	tons/yr												MT/yr			
Tractors/Loaders/ Backhoes	0.0403	0.3782	0.2735	1.1600e-003		0.0137	0.0137		0.0126	0.0126	0.0000	101.5038	101.5038	0.0328	0.0000	102.3246
Total	0.0403	0.3782	0.2735	1.1600e-003		0.0137	0.0137		0.0126	0.0126	0.0000	101.5038	101.5038	0.0328	0.0000	102.3246

10.0 Stationary Equipment**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

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APPENDIX 4.4:

CALEEMOD PROJECT BUILDOUT (PHASE 2) OPERATIONAL EMISSIONS MODEL OUTPUTS

First March Logistics (Building 1 Operations - High-Cube Fulfillment Center) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**First March Logistics (Building 1 Operations - High-Cube Fulfillment Center)**

Riverside-South Coast County, Annual

1.0 Project Characteristics**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	350.00	1000sqft	8.03	350,000.00	0
User Defined Industrial	350.00	User Defined Unit	0.00	0.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
Climate Zone	10			Operational Year	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Operations run only

Off-road Equipment - Operations run only

Vehicle Trips - Trip characteristics based on information provided in the Traffic Analysis

Fleet Mix - Passenger Car Mix estimated based on the CalEEMod default fleet mix and the ratio of the vehicle classes (LDA, LDT1, LDT2, MDV, & MCY). Truck Mix based on information in the Traffic Analysis

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	0.00
tblFleetMix	HHD	0.02	0.00
tblFleetMix	HHD	0.02	0.78

First March Logistics (Building 1 Operations - High-Cube Fulfillment Center) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblFleetMix	LDA	0.54	0.58
tblFleetMix	LDA	0.54	0.00
tblFleetMix	LDT1	0.06	0.06
tblFleetMix	LDT1	0.06	0.00
tblFleetMix	LDT2	0.17	0.19
tblFleetMix	LDT2	0.17	0.00
tblFleetMix	LHD1	0.03	0.00
tblFleetMix	LHD1	0.03	0.09
tblFleetMix	LHD2	7.1910e-003	0.00
tblFleetMix	LHD2	7.1910e-003	0.02
tblFleetMix	MCY	0.02	0.03
tblFleetMix	MCY	0.02	0.00
tblFleetMix	MDV	0.14	0.15
tblFleetMix	MDV	0.14	0.00
tblFleetMix	MH	5.1890e-003	0.00
tblFleetMix	MH	5.1890e-003	0.00
tblFleetMix	MHD	0.01	0.00
tblFleetMix	MHD	0.01	0.11
tblFleetMix	OBUS	6.1100e-004	0.00
tblFleetMix	OBUS	6.1100e-004	0.00
tblFleetMix	SBUS	1.0970e-003	0.00
tblFleetMix	SBUS	1.0970e-003	0.00
tblFleetMix	UBUS	3.0900e-004	0.00
tblFleetMix	UBUS	3.0900e-004	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblVehicleTrips	CW_TL	16.60	40.00
tblVehicleTrips	CW_TTP	0.00	100.00

First March Logistics (Building 1 Operations - High-Cube Fulfillment Center) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleTrips	PR_TP	0.00	100.00
tblVehicleTrips	ST_TR	1.74	0.15
tblVehicleTrips	ST_TR	0.00	0.03
tblVehicleTrips	SU_TR	1.74	0.06
tblVehicleTrips	SU_TR	0.00	0.01
tblVehicleTrips	WD_TR	1.74	1.75
tblVehicleTrips	WD_TR	0.00	0.38

2.0 Emissions Summary

First March Logistics (Building 1 Operations - High-Cube Fulfillment Center) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.1 Overall Construction

Unmitigated Construction

Mitigated Construction

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
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First March Logistics (Building 1 Operations - High-Cube Fulfillment Center) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Highest

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.4278	8.0000e-005	8.9200e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0174	0.0174	5.0000e-005	0.0000	0.0185
Energy	3.7900e-003	0.0345	0.0290	2.1000e-004		2.6200e-003	2.6200e-003		2.6200e-003	2.6200e-003	0.0000	181.5460	181.5460	0.0129	2.1600e-003	182.5120
Mobile	0.3062	3.2050	3.4755	0.0230	1.3386	0.0395	1.3781	0.3633	0.0377	0.4009	0.0000	2,192.9919	2,192.9919	0.0513	0.2656	2,273.414
Waste						0.0000	0.0000		0.0000	0.0000	66.7840	0.0000	66.7840	3.9468	0.0000	165.4540
Water						0.0000	0.0000		0.0000	0.0000	25.6777	186.9022	212.5799	2.6531	0.0642	298.0354
Total	1.7377	3.2396	3.5133	0.0232	1.3386	0.0422	1.3808	0.3633	0.0403	0.4036	92.4618	2,561.4575	2,653.9193	6.6642	0.3319	2,919.439

First March Logistics (Building 1 Operations - High-Cube Fulfillment Center) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**2.2 Overall Operational****Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Area	1.4278	8.0000e-005	8.9200e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0174	0.0174	5.0000e-005	0.0000	0.0185	
Energy	3.7900e-003	0.0345	0.0290	2.1000e-004		2.6200e-003	2.6200e-003		2.6200e-003	2.6200e-003	0.0000	181.5460	181.5460	0.0129	2.1600e-003	182.5120	
Mobile	0.3062	3.2050	3.4755	0.0230	1.3386	0.0395	1.3781	0.3633	0.0377	0.4009	0.0000	2,192.9919	2,192.9919	0.0513	0.2656	2,273.4164	
Waste						0.0000	0.0000		0.0000	0.0000	66.7840	0.0000	66.7840	3.9468	0.0000	165.4546	
Water						0.0000	0.0000		0.0000	0.0000	25.6777	186.9022	212.5799	2.6531	0.0642	298.0354	
Total	1.7377	3.2396	3.5133	0.0232	1.3386	0.0422	1.3808	0.3633	0.0403	0.4036	92.4618	2,561.4575	2,653.9193	6.6642	0.3319	2,919.4369	

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	7/1/2022	6/30/2022	5	0	

Acres of Grading (Site Preparation Phase): 0

First March Logistics (Building 1 Operations - High-Cube Fulfillment Center) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**Acres of Grading (Grading Phase): 0****Acres of Paving: 0****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Excavators	0	8.00	158	0.38
Demolition	Rubber Tired Dozers	0	8.00	247	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

First March Logistics (Building 1 Operations - High-Cube Fulfillment Center) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Demolition - 2022

Unmitigated Construction On-Site

Unmitigated Construction Off-Site

First March Logistics (Building 1 Operations - High-Cube Fulfillment Center) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.2 Demolition - 2022****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000							

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000							

First March Logistics (Building 1 Operations - High-Cube Fulfillment Center) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**4.1 Mitigation Measures Mobile**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Mitigated	0.3062	3.2050	3.4755	0.0230	1.3386	0.0395	1.3781	0.3633	0.0377	0.4009	0.0000	2,192.991	2,192.991	0.0513	0.2656	2,273.416	
Unmitigated	0.3062	3.2050	3.4755	0.0230	1.3386	0.0395	1.3781	0.3633	0.0377	0.4009	0.0000	2,192.991	2,192.991	0.0513	0.2656	2,273.416	

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated		Mitigated	
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT	Annual VMT	Annual VMT
Unrefrigerated Warehouse-No Rail	614.01	52.40	20.97	1,924,523	1,924,523	1,924,523	1,924,523
User Defined Industrial	134.02	11.45	4.59	1,427,098	1,427,098	1,427,098	1,427,098
Total	748.02	63.84	25.55	3,351,621	3,351,621	3,351,621	3,351,621

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Unrefrigerated Warehouse-No Rail	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3
User Defined Industrial	40.00	8.40	6.90	100.00	0.00	0.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Unrefrigerated Warehouse-No Rail	0.578700	0.060500	0.186300	0.148900	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.025600	0.000000	0.000000

First March Logistics (Building 1 Operations - High-Cube Fulfillment Center) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

User Defined Industrial	0.000000	0.000000	0.000000	0.000000	0.087000	0.024100	0.111100	0.777800	0.000000	0.000000	0.000000	0.000000	0.000000
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5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	144.0046	144.0046	0.0122	1.4700e-003	144.7475
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	144.0046	144.0046	0.0122	1.4700e-003	144.7475
NaturalGas Mitigated	3.7900e-003	0.0345	0.0290	2.1000e-004		2.6200e-003	2.6200e-003	2.6200e-003	2.6200e-003	0.0000	37.5414	37.5414	7.2000e-004	6.9000e-004	37.7645	
NaturalGas Unmitigated	3.7900e-003	0.0345	0.0290	2.1000e-004		2.6200e-003	2.6200e-003	2.6200e-003	2.6200e-003	0.0000	37.5414	37.5414	7.2000e-004	6.9000e-004	37.7645	

First March Logistics (Building 1 Operations - High-Cube Fulfillment Center) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**5.2 Energy by Land Use - NaturalGas****Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Unrefrigerated Warehouse-No Rail	703500	3.7900e-003	0.0345	0.0290	2.1000e-004		2.6200e-003	2.6200e-003		2.6200e-003	2.6200e-003	0.0000	37.5414	37.5414	7.2000e-004	6.9000e-004	37.7645
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		3.7900e-003	0.0345	0.0290	2.1000e-004		2.6200e-003	2.6200e-003		2.6200e-003	2.6200e-003	0.0000	37.5414	37.5414	7.2000e-004	6.9000e-004	37.7645

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Unrefrigerated Warehouse-No Rail	703500	3.7900e-003	0.0345	0.0290	2.1000e-004		2.6200e-003	2.6200e-003		2.6200e-003	2.6200e-003	0.0000	37.5414	37.5414	7.2000e-004	6.9000e-004	37.7645
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		3.7900e-003	0.0345	0.0290	2.1000e-004		2.6200e-003	2.6200e-003		2.6200e-003	2.6200e-003	0.0000	37.5414	37.5414	7.2000e-004	6.9000e-004	37.7645

First March Logistics (Building 1 Operations - High-Cube Fulfillment Center) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**5.3 Energy by Land Use - Electricity****Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Unrefrigerated Warehouse-No Rail	812000	144.0046	0.0122	1.4700e-003	144.7475
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		144.0046	0.0122	1.4700e-003	144.7475

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Unrefrigerated Warehouse-No Rail	812000	144.0046	0.0122	1.4700e-003	144.7475
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		144.0046	0.0122	1.4700e-003	144.7475

6.0 Area Detail

First March Logistics (Building 1 Operations - High-Cube Fulfillment Center) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**6.1 Mitigation Measures Area**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr												MT/yr				
Mitigated	1.4278	8.0000e-005	8.9200e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0174	0.0174	5.0000e-005	0.0000	0.0185	
Unmitigated	1.4278	8.0000e-005	8.9200e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0174	0.0174	5.0000e-005	0.0000	0.0185	

6.2 Area by SubCategory**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
SubCategory	tons/yr												MT/yr				
Architectural Coating	0.1622					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Consumer Products	1.2647					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Landscaping	8.2000e-004	8.0000e-005	8.9200e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0174	0.0174	5.0000e-005	0.0000	0.0185	
Total	1.4278	8.0000e-005	8.9200e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0174	0.0174	5.0000e-005	0.0000	0.0185	

First March Logistics (Building 1 Operations - High-Cube Fulfillment Center) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**6.2 Area by SubCategory****Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
SubCategory	tons/yr															MT/yr	
Architectural Coating	0.1622					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.2647					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	8.2000e-004	8.0000e-005	8.9200e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0174	0.0174	5.0000e-005	0.0000	0.0185	
Total	1.4278	8.0000e-005	8.9200e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0174	0.0174	5.0000e-005	0.0000	0.0185	

7.0 Water Detail**7.1 Mitigation Measures Water**

First March Logistics (Building 1 Operations - High-Cube Fulfillment Center) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	212.5799	2.6531	0.0642	298.0354
Unmitigated	212.5799	2.6531	0.0642	298.0354

7.2 Water by Land Use**Unmitigated**

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Unrefrigerated Warehouse-No Rail	80.9375 / 0	212.5799	2.6531	0.0642	298.0354
User Defined Industrial	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		212.5799	2.6531	0.0642	298.0354

First March Logistics (Building 1 Operations - High-Cube Fulfillment Center) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**7.2 Water by Land Use****Mitigated**

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Unrefrigerated Warehouse-No Rail	80.9375 / 0	212.5799	2.6531	0.0642	298.0354
User Defined Industrial	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		212.5799	2.6531	0.0642	298.0354

8.0 Waste Detail**8.1 Mitigation Measures Waste****Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	66.7840	3.9468	0.0000	165.4546
Unmitigated	66.7840	3.9468	0.0000	165.4546

First March Logistics (Building 1 Operations - High-Cube Fulfillment Center) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**8.2 Waste by Land Use****Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Unrefrigerated Warehouse-No Rail	329	66.7840	3.9468	0.0000	165.4546
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		66.7840	3.9468	0.0000	165.4546

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Unrefrigerated Warehouse-No Rail	329	66.7840	3.9468	0.0000	165.4546
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		66.7840	3.9468	0.0000	165.4546

9.0 Operational Offroad

First March Logistics (Building 1 Operations - High-Cube Fulfillment Center) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

First March Logistics (Building 1 Operations - Manufacturing) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**First March Logistics (Building 1 Operations - Manufacturing)**

Riverside-South Coast County, Annual

1.0 Project Characteristics**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Manufacturing	100.00	1000sqft	2.30	100,000.00	0
User Defined Industrial	100.00	User Defined Unit	0.00	0.00	0
Other Asphalt Surfaces	198.94	1000sqft	4.57	198,942.00	0
Parking Lot	262.00	Space	2.34	102,031.00	0
City Park	2.75	Acre	2.75	119,841.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
Climate Zone	10			Operational Year	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Total Project Area (Building 1 without High-Cube Fulfillment Center) is 11.96 acres

Construction Phase - Operations run only

Off-road Equipment - Operations run only

Vehicle Trips - Trip characteristics based on information provided in the Traffic Analysis

Operational Off-Road Equipment - Based on SCAQMD High Cube Warehouse Truck Trip Study White Paper Summary of Business Survey Results (2014)

Fleet Mix - Passenger Car Mix estimated based on the CalEEMod default fleet mix and the ratio of the vehicle classes (LDA, LDT1, LDT2, MDV, & MCY). Truck Mix based on information in the Traffic Analysis

First March Logistics (Building 1 Operations - Manufacturing) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	0.00
tblConstructionPhase	PhaseEndDate	7/28/2022	6/30/2022
tblFleetMix	HHD	0.02	0.00
tblFleetMix	HHD	0.02	0.62
tblFleetMix	LDA	0.54	0.58
tblFleetMix	LDA	0.54	0.00
tblFleetMix	LDT1	0.06	0.06
tblFleetMix	LDT1	0.06	0.00
tblFleetMix	LDT2	0.17	0.19
tblFleetMix	LDT2	0.17	0.00
tblFleetMix	LHD1	0.03	0.00
tblFleetMix	LHD1	0.03	0.15
tblFleetMix	LHD2	7.1910e-003	0.00
tblFleetMix	LHD2	7.1910e-003	0.04
tblFleetMix	MCY	0.02	0.03
tblFleetMix	MCY	0.02	0.00
tblFleetMix	MDV	0.14	0.15
tblFleetMix	MDV	0.14	0.00
tblFleetMix	MH	5.1890e-003	0.00
tblFleetMix	MH	5.1890e-003	0.00
tblFleetMix	MHD	0.01	0.00
tblFleetMix	MHD	0.01	0.19
tblFleetMix	OBUS	6.1100e-004	0.00
tblFleetMix	OBUS	6.1100e-004	0.00
tblFleetMix	SBUS	1.0970e-003	0.00
tblFleetMix	SBUS	1.0970e-003	0.00
tblFleetMix	UBUS	3.0900e-004	0.00
tblFleetMix	UBUS	3.0900e-004	0.00

First March Logistics (Building 1 Operations - Manufacturing) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblLandUse	LandUseSquareFees	104,800.00	102,031.00
tblLandUse	LandUseSquareFees	119,790.00	119,841.00
tblLandUse	LotAcreage	2.36	2.34
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	365.00
tblOperationalOffRoadEquipment	OperFuelType	Diesel	CNG
tblOperationalOffRoadEquipment	OperHorsePower	97.00	200.00
tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	4.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	2.00
tblVehicleTrips	CC_TTP	48.00	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TL	16.60	40.00
tblVehicleTrips	CW_TTP	33.00	0.00
tblVehicleTrips	CW_TTP	0.00	100.00
tblVehicleTrips	DV_TP	28.00	0.00
tblVehicleTrips	PB_TP	6.00	0.00
tblVehicleTrips	PR_TP	66.00	0.00
tblVehicleTrips	PR_TP	0.00	100.00
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	ST_TR	6.42	5.74
tblVehicleTrips	ST_TR	0.00	0.68
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	SU_TR	5.09	4.55
tblVehicleTrips	SU_TR	0.00	0.54
tblVehicleTrips	WD_TR	0.78	0.00
tblVehicleTrips	WD_TR	3.93	3.54
tblVehicleTrips	WD_TR	0.00	0.42

First March Logistics (Building 1 Operations - Manufacturing) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

Mitigated Construction

First March Logistics (Building 1 Operations - Manufacturing) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)						Maximum Mitigated ROG + NOX (tons/quarter)							
		Highest														

2.2 Overall Operational**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.4333	8.0000e-005	8.4600e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0165	0.0165	4.0000e-005	0.0000	0.0176
Energy	0.0174	0.1585	0.1331	9.5000e-004		0.0120	0.0120		0.0120	0.0120	0.0000	354.7851	354.7851	0.0187	5.0300e-003	356.7506
Mobile	0.2553	1.5039	2.9034	0.0132	0.9630	0.0184	0.9814	0.2603	0.0175	0.2778	0.0000	1,252.2727	1,252.2727	0.0356	0.1231	1,289.8488
Offroad	0.0399	0.3552	0.2742	1.1600e-003		0.0130	0.0130		0.0119	0.0119	0.0000	101.5390	101.5390	0.0328	0.0000	102.3600
Waste						0.0000	0.0000		0.0000	0.0000	25.2196	0.0000	25.2196	1.4904	0.0000	62.4805
Water						0.0000	0.0000		0.0000	0.0000	7.3365	59.8565	67.1930	0.7586	0.0184	91.6421
Total	0.7459	2.0176	3.3192	0.0153	0.9630	0.0435	1.0064	0.2603	0.0415	0.3018	32.5561	1,768.4697	1,801.0258	2.3362	0.1465	1,903.0995

First March Logistics (Building 1 Operations - Manufacturing) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**2.2 Overall Operational****Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Area	0.4333	8.0000e-005	8.4600e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0165	0.0165	4.0000e-005	0.0000	0.0176	
Energy	0.0174	0.1585	0.1331	9.5000e-004		0.0120	0.0120		0.0120	0.0120	0.0000	354.7851	354.7851	0.0187	5.0300e-003	356.7506	
Mobile	0.2553	1.5039	2.9034	0.0132	0.9630	0.0184	0.9814	0.2603	0.0175	0.2778	0.0000	1,252.2727	1,252.2727	0.0356	0.1231	1,289.8488	
Offroad	0.0399	0.3552	0.2742	1.1600e-003		0.0130	0.0130		0.0119	0.0119	0.0000	101.5390	101.5390	0.0328	0.0000	102.3600	
Waste						0.0000	0.0000		0.0000	0.0000	25.2196	0.0000	25.2196	1.4904	0.0000	62.4805	
Water						0.0000	0.0000		0.0000	0.0000	7.3365	59.8565	67.1930	0.7586	0.0184	91.6421	
Total	0.7459	2.0176	3.3192	0.0153	0.9630	0.0435	1.0064	0.2603	0.0415	0.3018	32.5561	1,768.4697	1,801.0258	2.3362	0.1465	1,903.0995	

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	7/1/2022	6/30/2022	5	0	

First March Logistics (Building 1 Operations - Manufacturing) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**Acres of Grading (Site Preparation Phase): 0****Acres of Grading (Grading Phase): 0****Acres of Paving: 6.91****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Excavators	0	8.00	158	0.38
Demolition	Rubber Tired Dozers	0	8.00	247	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

First March Logistics (Building 1 Operations - Manufacturing) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2022

Unmitigated Construction On-Site

Unmitigated Construction Off-Site

First March Logistics (Building 1 Operations - Manufacturing) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.2 Demolition - 2022****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000							

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000							

First March Logistics (Building 1 Operations - Manufacturing) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**4.1 Mitigation Measures Mobile**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Mitigated	0.2553	1.5039	2.9034	0.0132	0.9630	0.0184	0.9814	0.2603	0.0175	0.2778	0.0000	1,252.272	1,252.272	0.0356	0.1231	1,289.848	
Unmitigated	0.2553	1.5039	2.9034	0.0132	0.9630	0.0184	0.9814	0.2603	0.0175	0.2778	0.0000	1,252.272	1,252.272	0.0356	0.1231	1,289.848	

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated		Mitigated	
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00				
Manufacturing	354.00	573.91	455.02	1,770,634		1,770,634	
Other Asphalt Surfaces	0.00	0.00	0.00				
Parking Lot	0.00	0.00	0.00				
User Defined Industrial	42.00	68.09	53.98	690,706		690,706	
Total	396.00	642.00	509.00	2,461,340		2,461,340	

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Manufacturing	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

First March Logistics (Building 1 Operations - Manufacturing) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
User Defined Industrial	40.00	8.40	6.90	100.00	0.00	0.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.537845	0.056225	0.173186	0.138405	0.025906	0.007191	0.011447	0.018769	0.000611	0.000309	0.023821	0.001097	0.005189
Manufacturing	0.578700	0.060500	0.186300	0.148900	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.025600	0.000000	0.000000
Other Asphalt Surfaces	0.537845	0.056225	0.173186	0.138405	0.025906	0.007191	0.011447	0.018769	0.000611	0.000309	0.023821	0.001097	0.005189
Parking Lot	0.537845	0.056225	0.173186	0.138405	0.025906	0.007191	0.011447	0.018769	0.000611	0.000309	0.023821	0.001097	0.005189
User Defined Industrial	0.000000	0.000000	0.000000	0.000000	0.149100	0.041400	0.190500	0.619000	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

First March Logistics (Building 1 Operations - Manufacturing) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated							0.0000	0.0000	0.0000	0.0000	0.0000	182.2599	182.2599	0.0154	1.8600e-003	183.2002
Electricity Unmitigated							0.0000	0.0000	0.0000	0.0000	0.0000	182.2599	182.2599	0.0154	1.8600e-003	183.2002
NaturalGas Mitigated	0.0174	0.1585	0.1331	9.5000e-004			0.0120	0.0120	0.0120	0.0120	0.0000	172.5252	172.5252	3.3100e-003	3.1600e-003	173.5504
NaturalGas Unmitigated	0.0174	0.1585	0.1331	9.5000e-004			0.0120	0.0120	0.0120	0.0120	0.0000	172.5252	172.5252	3.3100e-003	3.1600e-003	173.5504

First March Logistics (Building 1 Operations - Manufacturing) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**5.2 Energy by Land Use - NaturalGas****Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Manufacturing	3.233e+006	0.0174	0.1585	0.1331	9.5000e-004		0.0120	0.0120		0.0120	0.0120	0.0000	172.5252	172.5252	3.3100e-003	3.1600e-003	173.5504
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0174	0.1585	0.1331	9.5000e-004		0.0120	0.0120		0.0120	0.0120	0.0000	172.5252	172.5252	3.3100e-003	3.1600e-003	173.5504

First March Logistics (Building 1 Operations - Manufacturing) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**5.2 Energy by Land Use - NaturalGas****Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Manufacturing	3.233e+006	0.0174	0.1585	0.1331	9.5000e-004		0.0120	0.0120		0.0120	0.0120	0.0000	172.5252	172.5252	3.3100e-003	3.1600e-003	173.5504
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0174	0.1585	0.1331	9.5000e-004		0.0120	0.0120		0.0120	0.0120	0.0000	172.5252	172.5252	3.3100e-003	3.1600e-003	173.5504

First March Logistics (Building 1 Operations - Manufacturing) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**5.3 Energy by Land Use - Electricity****Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Manufacturing	992000	175.9268	0.0149	1.8000e-003	176.8344
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	35710.8	6.3332	5.3000e-004	6.0000e-005	6.3658
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		182.2599	0.0154	1.8600e-003	183.2002

First March Logistics (Building 1 Operations - Manufacturing) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**5.3 Energy by Land Use - Electricity****Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Manufacturing	992000	175.9268	0.0149	1.8000e-003	176.8344
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	35710.8	6.3332	5.3000e-004	6.0000e-005	6.3658
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		182.2599	0.0154	1.8600e-003	183.2002

6.0 Area Detail**6.1 Mitigation Measures Area**

First March Logistics (Building 1 Operations - Manufacturing) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Mitigated	0.4333	8.0000e-005	8.4600e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0165	0.0165	4.0000e-005	0.0000	0.0176	
Unmitigated	0.4333	8.0000e-005	8.4600e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0165	0.0165	4.0000e-005	0.0000	0.0176	

6.2 Area by SubCategoryUnmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
SubCategory	tons/yr											MT/yr					
Architectural Coating	0.0505					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Consumer Products	0.3819					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Landscaping	7.8000e-004	8.0000e-005	8.4600e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0165	0.0165	4.0000e-005	0.0000	0.0176	
Total	0.4332	8.0000e-005	8.4600e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0165	0.0165	4.0000e-005	0.0000	0.0176	

First March Logistics (Building 1 Operations - Manufacturing) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**6.2 Area by SubCategory****Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr												MT/yr			
Architectural Coating	0.0505					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3819					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	7.8000e-004	8.0000e-005	8.4600e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0165	0.0165	4.0000e-005	0.0000	0.0176
Total	0.4332	8.0000e-005	8.4600e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0165	0.0165	4.0000e-005	0.0000	0.0176

7.0 Water Detail**7.1 Mitigation Measures Water**

First March Logistics (Building 1 Operations - Manufacturing) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	67.1930	0.7586	0.0184	91.6421
Unmitigated	67.1930	0.7586	0.0184	91.6421

7.2 Water by Land Use**Unmitigated**

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 3.27657	6.4559	5.4000e-004	7.0000e-005	6.4892
Manufacturing	23.125 / 0	60.7371	0.7580	0.0183	85.1530
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
User Defined Industrial	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		67.1930	0.7586	0.0184	91.6421

First March Logistics (Building 1 Operations - Manufacturing) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**7.2 Water by Land Use****Mitigated**

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 3.27657	6.4559	5.4000e- 004	7.0000e- 005	6.4892
Manufacturing	23.125 / 0	60.7371	0.7580	0.0183	85.1530
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
User Defined Industrial	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		67.1930	0.7586	0.0184	91.6421

8.0 Waste Detail**8.1 Mitigation Measures Waste**

First March Logistics (Building 1 Operations - Manufacturing) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**Category/Year**

	Total CO2	CH4	N2O	CO2e
MT/yr				
Mitigated	25.2196	1.4904	0.0000	62.4805
Unmitigated	25.2196	1.4904	0.0000	62.4805

8.2 Waste by Land Use**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use tons MT/yr					
City Park	0.24	0.0487	2.8800e-003	0.0000	0.1207
Manufacturing	124	25.1709	1.4876	0.0000	62.3598
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		25.2196	1.4904	0.0000	62.4805

First March Logistics (Building 1 Operations - Manufacturing) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**8.2 Waste by Land Use****Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.24	0.0487	2.8800e-003	0.0000	0.1207
Manufacturing	124	25.1709	1.4876	0.0000	62.3598
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		25.2196	1.4904	0.0000	62.4805

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Tractors/Loaders/Backhoes	2	4.00	365	200	0.37	CNG

First March Logistics (Building 1 Operations - Manufacturing) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**UnMitigated/Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	tons/yr												MT/yr			
Tractors/Loaders/ Backhoes	0.0399	0.3552	0.2742	1.1600e-003		0.0130	0.0130		0.0119	0.0119	0.0000	101.5390	101.5390	0.0328	0.0000	102.3600
Total	0.0399	0.3552	0.2742	1.1600e-003		0.0130	0.0130		0.0119	0.0119	0.0000	101.5390	101.5390	0.0328	0.0000	102.3600

10.0 Stationary Equipment**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

First March Logistics (Building 2 Operations - Warehouse) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**First March Logistics (Building 2 Operations - Warehouse)**

Riverside-South Coast County, Annual

1.0 Project Characteristics**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	139.97	1000sqft	3.21	139,971.00	0
User Defined Industrial	139.97	User Defined Unit	0.00	0.00	0
Parking Lot	75.00	Space	0.46	20,026.00	0
City Park	0.78	Acre	0.78	33,787.00	0
Other Asphalt Surfaces	84.93	1000sqft	1.95	84,926.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
Climate Zone	10			Operational Year	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Total Project Area (Building 2) is 6.40 acres

Construction Phase - Operations run only

Off-road Equipment - Operations run only

Vehicle Trips - Trip characteristics based on information provided in the Traffic Analysis

Fleet Mix - Passenger Car Mix estimated based on the CalEEMod default fleet mix and the ratio of the vehicle classes (LDA, LDT1, LDT2, MDV, & MCY). Truck Mix based on information in the Traffic Analysis

Operational Off-Road Equipment - Based on SCAQMD High Cube Warehouse Truck Trip Study White Paper Summary of Business Survey Results (2014)

First March Logistics (Building 2 Operations - Warehouse) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	0.00
tblConstructionPhase	PhaseEndDate	12/14/2023	11/16/2023
tblFleetMix	HHD	0.02	0.00
tblFleetMix	HHD	0.02	0.62
tblFleetMix	LDA	0.54	0.58
tblFleetMix	LDA	0.54	0.00
tblFleetMix	LDT1	0.06	0.06
tblFleetMix	LDT1	0.06	0.00
tblFleetMix	LDT2	0.17	0.19
tblFleetMix	LDT2	0.17	0.00
tblFleetMix	LHD1	0.03	0.00
tblFleetMix	LHD1	0.03	0.14
tblFleetMix	LHD2	7.1910e-003	0.00
tblFleetMix	LHD2	7.1910e-003	0.04
tblFleetMix	MCY	0.02	0.03
tblFleetMix	MCY	0.02	0.00
tblFleetMix	MDV	0.14	0.15
tblFleetMix	MDV	0.14	0.00
tblFleetMix	MH	5.1890e-003	0.00
tblFleetMix	MH	5.1890e-003	0.00
tblFleetMix	MHD	0.01	0.00
tblFleetMix	MHD	0.01	0.21
tblFleetMix	OBUS	6.1100e-004	0.00
tblFleetMix	OBUS	6.1100e-004	0.00
tblFleetMix	SBUS	1.0970e-003	0.00
tblFleetMix	SBUS	1.0970e-003	0.00
tblFleetMix	UBUS	3.0900e-004	0.00
tblFleetMix	UBUS	3.0900e-004	0.00

First March Logistics (Building 2 Operations - Warehouse) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblLandUse	LandUseSquareFees	30,000.00	20,026.00
tblLandUse	LandUseSquareFees	33,802.56	33,787.00
tblLandUse	LotAcreage	0.68	0.46
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	365.00
tblOperationalOffRoadEquipment	OperFuelType	Diesel	CNG
tblOperationalOffRoadEquipment	OperHorsePower	97.00	200.00
tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	4.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00
tblVehicleTrips	CC_TTP	48.00	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TL	16.60	40.00
tblVehicleTrips	CW_TTP	33.00	0.00
tblVehicleTrips	CW_TTP	0.00	100.00
tblVehicleTrips	DV_TP	28.00	0.00
tblVehicleTrips	PB_TP	6.00	0.00
tblVehicleTrips	PR_TP	66.00	0.00
tblVehicleTrips	PR_TP	0.00	100.00
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	ST_TR	1.74	0.12
tblVehicleTrips	ST_TR	0.00	0.03
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	SU_TR	1.74	0.05
tblVehicleTrips	SU_TR	0.00	0.01
tblVehicleTrips	WD_TR	0.78	0.00
tblVehicleTrips	WD_TR	1.74	1.27
tblVehicleTrips	WD_TR	0.00	0.49

First March Logistics (Building 2 Operations - Warehouse) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

Mitigated Construction

First March Logistics (Building 2 Operations - Warehouse) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)						Maximum Mitigated ROG + NOX (tons/quarter)							
		Highest														

2.2 Overall Operational**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.5797	5.0000e-005	5.6100e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0109	0.0109	3.0000e-005	0.0000	0.0117
Energy	1.5200e-003	0.0138	0.0116	8.0000e-005		1.0500e-003	1.0500e-003		1.0500e-003	1.0500e-003	0.0000	73.8464	73.8464	5.2500e-003	8.8000e-004	74.2391
Mobile	0.1000	1.4332	1.1374	9.7900e-003	0.5243	0.0170	0.5413	0.1443	0.0162	0.1605	0.0000	937.8479	937.8479	0.0177	0.1176	973.3224
Offroad	0.0200	0.1776	0.1371	5.8000e-004		6.4900e-003	6.4900e-003		5.9700e-003	5.9700e-003	0.0000	50.7695	50.7695	0.0164	0.0000	51.1800
Waste						0.0000	0.0000		0.0000	0.0000	26.7217	0.0000	26.7217	1.5792	0.0000	66.2020
Water						0.0000	0.0000		0.0000	0.0000	10.2689	76.5760	86.8449	1.0612	0.0257	121.0292
Total	0.7012	1.6246	1.2917	0.0105	0.5243	0.0246	0.5489	0.1443	0.0233	0.1676	36.9906	1,139.0507	1,176.0413	2.6798	0.1441	1,285.9843

First March Logistics (Building 2 Operations - Warehouse) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**2.2 Overall Operational****Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Area	0.5797	5.0000e-005	5.6100e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0109	0.0109	3.0000e-005	0.0000	0.0117	
Energy	1.5200e-003	0.0138	0.0116	8.0000e-005		1.0500e-003	1.0500e-003		1.0500e-003	1.0500e-003	0.0000	73.8464	73.8464	5.2500e-003	8.8000e-004	74.2391	
Mobile	0.1000	1.4332	1.1374	9.7900e-003	0.5243	0.0170	0.5413	0.1443	0.0162	0.1605	0.0000	937.8479	937.8479	0.0177	0.1176	973.3224	
Offroad	0.0200	0.1776	0.1371	5.8000e-004		6.4900e-003	6.4900e-003		5.9700e-003	5.9700e-003	0.0000	50.7695	50.7695	0.0164	0.0000	51.1800	
Waste						0.0000	0.0000		0.0000	0.0000	26.7217	0.0000	26.7217	1.5792	0.0000	66.2020	
Water						0.0000	0.0000		0.0000	0.0000	10.2689	76.5760	86.8449	1.0612	0.0257	121.0292	
Total	0.7012	1.6246	1.2917	0.0105	0.5243	0.0246	0.5489	0.1443	0.0233	0.1676	36.9906	1,139.0507	1,176.0413	2.6798	0.1441	1,285.9843	

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	11/17/2023	11/16/2023	5	0	

First March Logistics (Building 2 Operations - Warehouse) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**Acres of Grading (Site Preparation Phase): 0****Acres of Grading (Grading Phase): 0****Acres of Paving: 2.41****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Excavators	0	8.00	158	0.38
Demolition	Rubber Tired Dozers	0	8.00	247	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

First March Logistics (Building 2 Operations - Warehouse) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2023

Unmitigated Construction On-Site

Unmitigated Construction Off-Site

First March Logistics (Building 2 Operations - Warehouse) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.2 Demolition - 2023****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000							

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000							

First March Logistics (Building 2 Operations - Warehouse) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**4.1 Mitigation Measures Mobile**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Mitigated	0.1000	1.4332	1.1374	9.7900e-003	0.5243	0.0170	0.5413	0.1443	0.0162	0.1605	0.0000	937.8479	937.8479	0.0177	0.1176	973.3224	
Unmitigated	0.1000	1.4332	1.1374	9.7900e-003	0.5243	0.0170	0.5413	0.1443	0.0162	0.1605	0.0000	937.8479	937.8479	0.0177	0.1176	973.3224	

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated		Mitigated	
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00				
Other Asphalt Surfaces	0.00	0.00	0.00				
Parking Lot	0.00	0.00	0.00				
Unrefrigerated Warehouse-No Rail	178.00	17.23	6.90	559,676	559,676	559,676	559,676
User Defined Industrial	68.00	3.77	1.50	718,125	718,125	718,125	718,125
Total	246.00	21.00	8.40	1,277,801	1,277,801	1,277,801	1,277,801

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
User Defined Industrial	40.00	8.40	6.90	100.00	0.00	0.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.537845	0.056225	0.173186	0.138405	0.025906	0.007191	0.011447	0.018769	0.000611	0.000309	0.023821	0.001097	0.005189
Other Asphalt Surfaces	0.537845	0.056225	0.173186	0.138405	0.025906	0.007191	0.011447	0.018769	0.000611	0.000309	0.023821	0.001097	0.005189
Parking Lot	0.537845	0.056225	0.173186	0.138405	0.025906	0.007191	0.011447	0.018769	0.000611	0.000309	0.023821	0.001097	0.005189
Unrefrigerated Warehouse-No Rail	0.578700	0.060500	0.186300	0.148900	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.025600	0.000000	0.000000
User Defined Industrial	0.000000	0.000000	0.000000	0.000000	0.138200	0.038300	0.205900	0.617600	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

First March Logistics (Building 2 Operations - Warehouse) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Electricity Mitigated							0.0000	0.0000		0.0000	0.0000	58.8329	58.8329	4.9700e-003	6.0000e-004	59.1364	
Electricity Unmitigated							0.0000	0.0000		0.0000	0.0000	58.8329	58.8329	4.9700e-003	6.0000e-004	59.1364	
NaturalGas Mitigated	1.5200e-003	0.0138	0.0116	8.0000e-005			1.0500e-003	1.0500e-003		1.0500e-003	1.0500e-003	0.0000	15.0135	15.0135	2.9000e-004	2.8000e-004	15.1027
NaturalGas Unmitigated	1.5200e-003	0.0138	0.0116	8.0000e-005			1.0500e-003	1.0500e-003		1.0500e-003	1.0500e-003	0.0000	15.0135	15.0135	2.9000e-004	2.8000e-004	15.1027

First March Logistics (Building 2 Operations - Warehouse) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**5.2 Energy by Land Use - NaturalGas****Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	281342	1.5200e-003	0.0138	0.0116	8.0000e-005		1.0500e-003	1.0500e-003		1.0500e-003	1.0500e-003	0.0000	15.0135	15.0135	2.9000e-004	2.8000e-004	15.1027
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		1.5200e-003	0.0138	0.0116	8.0000e-005		1.0500e-003	1.0500e-003		1.0500e-003	1.0500e-003	0.0000	15.0135	15.0135	2.9000e-004	2.8000e-004	15.1027

First March Logistics (Building 2 Operations - Warehouse) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**5.2 Energy by Land Use - NaturalGas****Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	281342	1.5200e-003	0.0138	0.0116	8.0000e-005		1.0500e-003	1.0500e-003		1.0500e-003	1.0500e-003	0.0000	15.0135	15.0135	2.9000e-004	2.8000e-004	15.1027
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		1.5200e-003	0.0138	0.0116	8.0000e-005		1.0500e-003	1.0500e-003		1.0500e-003	1.0500e-003	0.0000	15.0135	15.0135	2.9000e-004	2.8000e-004	15.1027

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**5.3 Energy by Land Use - Electricity****Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	7009.1	1.2430	1.0000e-004	1.0000e-005	1.2495
Unrefrigerated Warehouse-No Rail	324733	57.5899	4.8600e-003	5.9000e-004	57.8870
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		58.8329	4.9600e-003	6.0000e-004	59.1365

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**5.3 Energy by Land Use - Electricity****Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	7009.1	1.2430	1.0000e-004	1.0000e-005	1.2495
Unrefrigerated Warehouse-No Rail	324733	57.5899	4.8600e-003	5.9000e-004	57.8870
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		58.8329	4.9600e-003	6.0000e-004	59.1365

6.0 Area Detail**6.1 Mitigation Measures Area**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Mitigated	0.5797	5.0000e-005	5.6100e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0109	0.0109	3.0000e-005	0.0000	0.0117	
Unmitigated	0.5797	5.0000e-005	5.6100e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0109	0.0109	3.0000e-005	0.0000	0.0117	

6.2 Area by SubCategoryUnmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
SubCategory	tons/yr											MT/yr					
Architectural Coating	0.0663					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Consumer Products	0.5129					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Landscaping	5.2000e-004	5.0000e-005	5.6100e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0109	0.0109	3.0000e-005	0.0000	0.0117	
Total	0.5798	5.0000e-005	5.6100e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0109	0.0109	3.0000e-005	0.0000	0.0117	

First March Logistics (Building 2 Operations - Warehouse) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**6.2 Area by SubCategory****Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0663					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.5129					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	5.2000e-004	5.0000e-005	5.6100e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0109	0.0109	3.0000e-005	0.0000	0.0117
Total	0.5798	5.0000e-005	5.6100e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0109	0.0109	3.0000e-005	0.0000	0.0117

7.0 Water Detail**7.1 Mitigation Measures Water**

First March Logistics (Building 2 Operations - Warehouse) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	86.8449	1.0612	0.0257	121.0292
Unmitigated	86.8449	1.0612	0.0257	121.0292

7.2 Water by Land Use**Unmitigated**

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 0.929355	1.8311	1.5000e- 004	2.0000e- 005	1.8406
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	32.3681 / 0	85.0138	1.0610	0.0257	119.1886
User Defined Industrial	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		86.8449	1.0612	0.0257	121.0292

First March Logistics (Building 2 Operations - Warehouse) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**7.2 Water by Land Use****Mitigated**

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 0.929355	1.8311	1.5000e- 004	2.0000e- 005	1.8406
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	32.3681 / 0	85.0138	1.0610	0.0257	119.1886
User Defined Industrial	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		86.8449	1.0612	0.0257	121.0292

8.0 Waste Detail**8.1 Mitigation Measures Waste**

First March Logistics (Building 2 Operations - Warehouse) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**Category/Year**

	Total CO2	CH4	N2O	CO2e
MT/yr				
Mitigated	26.7217	1.5792	0.0000	66.2020
Unmitigated	26.7217	1.5792	0.0000	66.2020

8.2 Waste by Land Use**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use tons MT/yr					
City Park	0.07	0.0142	8.4000e-004	0.0000	0.0352
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	131.57	26.7075	1.5784	0.0000	66.1668
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		26.7217	1.5792	0.0000	66.2020

First March Logistics (Building 2 Operations - Warehouse) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**8.2 Waste by Land Use****Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.07	0.0142	8.4000e-004	0.0000	0.0352
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	131.57	26.7075	1.5784	0.0000	66.1668
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		26.7217	1.5792	0.0000	66.2020

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Tractors/Loaders/Backhoes	1	4.00	365	200	0.37	CNG

First March Logistics (Building 2 Operations - Warehouse) - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**UnMitigated/Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	tons/yr												MT/yr			
Tractors/Loaders/ Backhoes	0.0200	0.1776	0.1371	5.8000e-004		6.4900e-003	6.4900e-003		5.9700e-003	5.9700e-003	0.0000	50.7695	50.7695	0.0164	0.0000	51.1800
Total	0.0200	0.1776	0.1371	5.8000e-004		6.4900e-003	6.4900e-003		5.9700e-003	5.9700e-003	0.0000	50.7695	50.7695	0.0164	0.0000	51.1800

10.0 Stationary Equipment**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

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APPENDIX 4.5:

EMFAC2017

Source: EMFAC2017 (v1.0.3) Emissions Inventory

Region Type: Sub-Area

Region: Riverside (SC)

Calendar Year: 2022

Season: Annual

Vehicle Classification: EMFAC2007 Categories

Units: miles/year for VMT, trips/year for Trips, tons/year for Emissions, 1000 gallons/year for Fuel Consumption

Region	CalYr	VehClass	MdlYr	Speed	Fuel	Population	VMT	Fuel_Consumption	Fuel_Consumption	Total Fuel	VMT	Total VMT	Miles per Gallon	Vehicle Class
Riverside (SC)	2022	HHDT	Aggregate	Aggregate	Gasoline	6.576938112	153457.8614	36.38308143	36383.08143	86338603.49	153457.8614	609730316.4	7.06	HHDT
Riverside (SC)	2022	HHDT	Aggregate	Aggregate	Diesel	15714.36952	606232799.9	84894.0389	84894038.9		606232799.9			
Riverside (SC)	2022	HHDT	Aggregate	Aggregate	Natural Gas	263.7933161	3344058.656	1408.18151	1408181.51		3344058.656			
Riverside (SC)	2022	LDA	Aggregate	Aggregate	Gasoline	581991.6725	8224182944	255876.5259	255876525.9	257472567.5	8224182944	8437175826	32.77	LDA
Riverside (SC)	2022	LDA	Aggregate	Aggregate	Diesel	5627.648407	83145410.99	1596.041638	1596041.638		83145410.99			
Riverside (SC)	2022	LDA	Aggregate	Aggregate	Electricity	9519.079074	129847470.9	0	0		129847470.9			
Riverside (SC)	2022	LDT1	Aggregate	Aggregate	Gasoline	60037.51621	784889608.4	28670.08786	28670087.86	28678196.65	784889608.4	790148273.6	27.55	LDT1
Riverside (SC)	2022	LDT1	Aggregate	Aggregate	Diesel	27.76404389	208778.8044	8.108788608	8108.788608		208778.8044			
Riverside (SC)	2022	LDT1	Aggregate	Aggregate	Electricity	356.2042589	5049886.408	0	0		5049886.408			
Riverside (SC)	2022	LDT2	Aggregate	Aggregate	Gasoline	182118.8677	2486397650	96428.35184	96428351.84	96853535.07	2486397650	2521171664	26.03	LDT2
Riverside (SC)	2022	LDT2	Aggregate	Aggregate	Diesel	1054.483634	16665909.69	425.1832295	425183.2295		16665909.69			
Riverside (SC)	2022	LDT2	Aggregate	Aggregate	Electricity	1677.633962	18108104.13	0	0		18108104.13			
Riverside (SC)	2022	LHDT1	Aggregate	Aggregate	Gasoline	15417.55767	163201148.4	15108.11893	15108118.93	23387437.93	163201148.4	336574881.3	14.39	LHDT1
Riverside (SC)	2022	LHDT1	Aggregate	Aggregate	Diesel	15837.49513	173373732.9	8279.318992	8279318.992		173373732.9			
Riverside (SC)	2022	LHDT2	Aggregate	Aggregate	Gasoline	2252.42518	24026208.75	2542.009363	2542009.363	6051733.364	24026208.75	91253583.76	15.08	LHDT2
Riverside (SC)	2022	LHDT2	Aggregate	Aggregate	Diesel	6123.275766	67227375.01	3509.724001	3509724.001		67227375.01			
Riverside (SC)	2022	MCY	Aggregate	Aggregate	Gasoline	28171.90267	62796448.34	1655.586212	1655586.212	1655586.212	62796448.34	62796448.34	37.93	MCY
Riverside (SC)	2022	MDV	Aggregate	Aggregate	Gasoline	154199.5457	1942294285	94789.21819	94789218.19	96446076.25	1942294285	2000039012	20.74	MDV
Riverside (SC)	2022	MDV	Aggregate	Aggregate	Diesel	3261.4865	47596581.84	1656.858052	1656858.052		47596581.84			
Riverside (SC)	2022	MDV	Aggregate	Aggregate	Electricity	916.717804	10148145.12	0	0		10148145.12			
Riverside (SC)	2022	MH	Aggregate	Aggregate	Gasoline	4849.122996	12414677.16	2406.257705	2406257.705	2875800.063	12414677.16	17521753.84	6.09	MH
Riverside (SC)	2022	MH	Aggregate	Aggregate	Diesel	1986.085476	5107076.677	469.5423575	469542.3575		5107076.677			
Riverside (SC)	2022	MHDT	Aggregate	Aggregate	Gasoline	1326.926938	17674320.91	3359.446933	3359446.933	24049505.3	17674320.91	248635402	10.34	MHDT
Riverside (SC)	2022	MHDT	Aggregate	Aggregate	Diesel	11907.6705	230961081.1	20690.05836	20690058.36		230961081.1			
Riverside (SC)	2022	OBUS	Aggregate	Aggregate	Gasoline	438.8357563	4993518.807	967.2190429	967219.0429	1483181.022	4993518.807	9603790.146	6.48	OBUS
Riverside (SC)	2022	OBUS	Aggregate	Aggregate	Diesel	222.2197269	4610271.339	515.9619792	515961.9792		4610271.339			
Riverside (SC)	2022	SBUS	Aggregate	Aggregate	Gasoline	417.9532809	4815312.165	544.2910283	544291.0283	1708055.084	4815312.165	13640990.38	7.99	SBUS
Riverside (SC)	2022	SBUS	Aggregate	Aggregate	Diesel	852.548169	8825678.217	1163.764056	1163764.056		8825678.217			
Riverside (SC)	2022	UBUS	Aggregate	Aggregate	Gasoline	164.4551683	7571499.764	1228.231474	1228231.474	3307606.769	7571499.764	16372886.42	4.95	UBUS
Riverside (SC)	2022	UBUS	Aggregate	Aggregate	Diesel	1.105797941	19153.01246	2.147195041	2147.195041		19153.01246			
Riverside (SC)	2022	UBUS	Aggregate	Aggregate	Electricity	0.058469431	409.3068597	0	0		409.3068597			
Riverside (SC)	2022	UBUS	Aggregate	Aggregate	Natural Gas	204.1188773	8781824.334	2077.2281	2077228.1		8781824.334			

Source: EMFAC2017 (v1.0.3) Emissions Inventory

Region Type: Sub-Area

Region: Riverside (SC)

Calendar Year: 2023

Season: Annual

Vehicle Classification: EMFAC2007 Categories

Units: miles/year for VMT, trips/year for Trips, tons/year for Emissions, 1000 gallons/year for Fuel Consumption

Region	CalYr	VehClass	MdlYr	Speed	Fuel	Population	VMT	Fuel_Consumption	Fuel_Consumption	Total Fuel	VMT	Total VMT	Miles per Gallon	Vehicle Class
Riverside (SC)	2023	HHDT	Aggregate	Aggregate	Gasoline	6.287048944	153937.6255	35.55040317	35550.40317	83956073.71	153937.6255	624266409.2	7.44	HHDT
Riverside (SC)	2023	HHDT	Aggregate	Aggregate	Diesel	15994.29576	620335254.9	82353.42203	82353422.03		620335254.9			
Riverside (SC)	2023	HHDT	Aggregate	Aggregate	Natural Gas	297.8339277	3777216.619	1567.101271	1567101.271		3777216.619			
Riverside (SC)	2023	LDA	Aggregate	Aggregate	Gasoline	600073.2625	8365084572	253390.156	253390156	255027967.5	8365084572	8616394452	33.79	LDA
Riverside (SC)	2023	LDA	Aggregate	Aggregate	Diesel	6022.455725	87471276.92	1637.811474	1637811.474		87471276.92			
Riverside (SC)	2023	LDA	Aggregate	Aggregate	Electricity	11812.58063	163838603.3	0	0		163838603.3			
Riverside (SC)	2023	LDT1	Aggregate	Aggregate	Gasoline	61620.9911	799977533.2	28439.50607	28439506.07	28446990.16	799977533.2	807387761	28.38	LDT1
Riverside (SC)	2023	LDT1	Aggregate	Aggregate	Diesel	25.82294405	195899.1133	7.484089094	7484.089094		195899.1133			
Riverside (SC)	2023	LDT1	Aggregate	Aggregate	Electricity	500.2265064	7214328.719	0	0		7214328.719			
Riverside (SC)	2023	LDT2	Aggregate	Aggregate	Gasoline	186844.1926	2523160631	94460.38646	94460386.46	94911274.58	2523160631	2564584260	27.02	LDT2
Riverside (SC)	2023	LDT2	Aggregate	Aggregate	Diesel	1179.189513	18179036.69	450.888116	450888.116		18179036.69			
Riverside (SC)	2023	LDT2	Aggregate	Aggregate	Electricity	2202.047417	23244591.93	0	0		23244591.93			
Riverside (SC)	2023	LHDT1	Aggregate	Aggregate	Gasoline	15202.19219	160036544.4	14645.65687	14645656.87	22712976.52	160036544.4	331139011.1	14.58	LHDT1
Riverside (SC)	2023	LHDT1	Aggregate	Aggregate	Diesel	15878.17916	171102466.7	8067.31965	8067319.65		171102466.7			
Riverside (SC)	2023	LHDT2	Aggregate	Aggregate	Gasoline	2254.447347	23819917.55	2491.847218	2491847.218	5925383.012	23819917.55	90400247.11	15.26	LHDT2
Riverside (SC)	2023	LHDT2	Aggregate	Aggregate	Diesel	6182.746468	66580329.56	3433.535795	3433535.795		66580329.56			
Riverside (SC)	2023	MCY	Aggregate	Aggregate	Gasoline	28475.24545	62139045.86	1639.73057	1639730.57	1639730.57	62139045.86	62139045.86	37.90	MCY
Riverside (SC)	2023	MDV	Aggregate	Aggregate	Gasoline	154204.1049	1919857377	90781.78682	90781786.82	92469161.97	1919857377	1983892786	21.45	MDV
Riverside (SC)	2023	MDV	Aggregate	Aggregate	Diesel	3492.231312	49837792.99	1687.375147	1687375.147		49837792.99			
Riverside (SC)	2023	MDV	Aggregate	Aggregate	Electricity	1314.447545	14197616.87	0	0		14197616.87			
Riverside (SC)	2023	MH	Aggregate	Aggregate	Gasoline	4646.002839	11786716.04	2262.850071	2262850.071	2716664.402	11786716.04	16757390.07	6.17	MH
Riverside (SC)	2023	MH	Aggregate	Aggregate	Diesel	1979.944695	4970674.029	453.8143312	453814.3312		4970674.029			
Riverside (SC)	2023	MHDT	Aggregate	Aggregate	Gasoline	1361.919314	18155961.42	3400.73407	3400734.07	23439444.62	18155961.42	251707089.5	10.74	MHDT
Riverside (SC)	2023	MHDT	Aggregate	Aggregate	Diesel	11600.10675	233551128.1	20038.71055	20038710.55		233551128.1			
Riverside (SC)	2023	OBUS	Aggregate	Aggregate	Gasoline	437.8068702	4892382.41	934.9605215	934960.5215	1447125.767	4892382.41	9596664.79	6.63	OBUS
Riverside (SC)	2023	OBUS	Aggregate	Aggregate	Diesel	221.7033657	4704282.38	512.1652457	512165.2457		4704282.38			
Riverside (SC)	2023	SBUS	Aggregate	Aggregate	Gasoline	428.8888994	4875379.461	549.2707658	549270.7658	1727264.498	4875379.461	13916051.77	8.06	SBUS
Riverside (SC)	2023	SBUS	Aggregate	Aggregate	Diesel	872.8772386	9040672.31	1177.993732	1177993.732		9040672.31			
Riverside (SC)	2023	UBUS	Aggregate	Aggregate	Gasoline	165.4254964	7616173.577	1224.574262	1224574.262	3317084.96	7616173.577	16469490.69	4.97	UBUS
Riverside (SC)	2023	UBUS	Aggregate	Aggregate	Diesel	0.141961099	3818.605614	0.410265377	410.2653772		3818.605614			
Riverside (SC)	2023	UBUS	Aggregate	Aggregate	Electricity	0.058469431	409.3068597	0	0		409.3068597			
Riverside (SC)	2023	UBUS	Aggregate	Aggregate	Natural Gas	206.2939379	8849089.206	2092.100433	2092100.433		8849089.206			

Source: EMFAC2017 (v1.0.3) Emissions Inventory

Region Type: Sub-Area

Region: Riverside (SC)

Calendar Year: 2024

Season: Annual

Vehicle Classification: EMFAC2007 Categories

Units: miles/year for VMT, trips/year for Trips, tons/year for Emissions, 1000 gallons/year for Fuel Consumption

Region	CalYr	VehClass	MdlYr	Speed	Fuel	Population	VMT	Fuel_Consumption	Fuel_Consumption	Total Fuel	VMT	Total VMT	Miles per Gallon	Vehicle Class
Riverside (SC)	2024	HHDT	Aggregate	Aggregate	Gasoline	6.027894532	156067.452	34.91407094	34914.07094	84785422.35	156067.452	639195735	7.54	HHDT
Riverside (SC)	2024	HHDT	Aggregate	Aggregate	Diesel	16452.58246	634825371.9	83031.97754	83031977.54		634825371.9			
Riverside (SC)	2024	HHDT	Aggregate	Aggregate	Natural Gas	332.158218	4214295.65	1718.530739	1718530.739		4214295.65			
Riverside (SC)	2024	LDA	Aggregate	Aggregate	Gasoline	617514.3579	8494156285	250350.369	250350369	252019374.3	8494156285	8788942835	34.87	LDA
Riverside (SC)	2024	LDA	Aggregate	Aggregate	Diesel	6395.726935	91453928.73	1669.005322	1669005.322		91453928.73			
Riverside (SC)	2024	LDA	Aggregate	Aggregate	Electricity	14425.0696	203332621	0	0		203332621			
Riverside (SC)	2024	LDT1	Aggregate	Aggregate	Gasoline	63219.76211	814421895.3	28168.45428	28168454.28	28175397.63	814421895.3	824288830.7	29.26	LDT1
Riverside (SC)	2024	LDT1	Aggregate	Aggregate	Diesel	24.10721025	185164.7943	6.943342769	6943.342769		185164.7943			
Riverside (SC)	2024	LDT1	Aggregate	Aggregate	Electricity	661.8262843	9681770.624	0	0		9681770.624			
Riverside (SC)	2024	LDT2	Aggregate	Aggregate	Gasoline	191595.1165	2559175496	92493.83301	92493833.01	92964376.5	2559175496	2607513287	28.05	LDT2
Riverside (SC)	2024	LDT2	Aggregate	Aggregate	Diesel	1293.932614	19542069.73	470.5434846	470543.4846		19542069.73			
Riverside (SC)	2024	LDT2	Aggregate	Aggregate	Electricity	2788.874311	28795720.7	0	0		28795720.7			
Riverside (SC)	2024	LHDT1	Aggregate	Aggregate	Gasoline	15013.79924	157356879.3	14199.49484	14199494.84	22056713.23	157356879.3	326408337.1	14.80	LHDT1
Riverside (SC)	2024	LHDT1	Aggregate	Aggregate	Diesel	15906.59016	169051457.8	7857.218387	7857218.387		169051457.8			
Riverside (SC)	2024	LHDT2	Aggregate	Aggregate	Gasoline	2255.583712	23637016.09	2438.901969	2438901.969	5796238.909	23637016.09	89605312.35	15.46	LHDT2
Riverside (SC)	2024	LHDT2	Aggregate	Aggregate	Diesel	6233.384608	65968296.27	3357.33694	3357336.94		65968296.27			
Riverside (SC)	2024	MCY	Aggregate	Aggregate	Gasoline	28768.15998	61601371.5	1626.832326	1626832.326	1626832.326	61601371.5	61601371.5	37.87	MCY
Riverside (SC)	2024	MDV	Aggregate	Aggregate	Gasoline	154289.1501	1900940688	86992.29115	86992291.15	88700698.08	1900940688	1971396478	22.23	MDV
Riverside (SC)	2024	MDV	Aggregate	Aggregate	Diesel	3716.540326	51906945.78	1708.406932	1708406.932		51906945.78			
Riverside (SC)	2024	MDV	Aggregate	Aggregate	Electricity	1759.655155	18548844.25	0	0		18548844.25			
Riverside (SC)	2024	MH	Aggregate	Aggregate	Gasoline	4447.773714	11225946.13	2123.326898	2123326.898	2562756.998	11225946.13	16076182.11	6.27	MH
Riverside (SC)	2024	MH	Aggregate	Aggregate	Diesel	1971.591273	4850235.983	439.4301004	439430.1004		4850235.983			
Riverside (SC)	2024	MHDT	Aggregate	Aggregate	Gasoline	1398.543137	18620000.87	3416.307123	3416307.123	23383978.6	18620000.87	255043840.6	10.91	MHDT
Riverside (SC)	2024	MHDT	Aggregate	Aggregate	Diesel	12021.28574	236423839.7	19967.67148	19967671.48		236423839.7			
Riverside (SC)	2024	OBUS	Aggregate	Aggregate	Gasoline	436.1488407	4803704.731	900.5610906	900561.0906	1416746.915	4803704.731	9597897.108	6.77	OBUS
Riverside (SC)	2024	OBUS	Aggregate	Aggregate	Diesel	228.3141363	4794192.377	516.1858245	516185.8245		4794192.377			
Riverside (SC)	2024	SBUS	Aggregate	Aggregate	Gasoline	439.6915571	4935952.059	553.2992785	553299.2785	174447.692	4935952.059	14201943.43	8.14	SBUS
Riverside (SC)	2024	SBUS	Aggregate	Aggregate	Diesel	894.0425814	9265991.371	1191.148413	1191148.413		9265991.371			
Riverside (SC)	2024	UBUS	Aggregate	Aggregate	Gasoline	166.3958246	7660847.389	1193.289294	1193289.294	3299057.329	7660847.389	16566094.97	5.02	UBUS
Riverside (SC)	2024	UBUS	Aggregate	Aggregate	Diesel	0.141961099	3818.605614	0.410285835	410.2858353		3818.605614			
Riverside (SC)	2024	UBUS	Aggregate	Aggregate	Electricity	0.058469431	409.3068597	0	0		409.3068597			
Riverside (SC)	2024	UBUS	Aggregate	Aggregate	Natural Gas	207.5051617	8901019.67	2105.357749	2105357.749		8901019.67			

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