APPENDIX L

ENERGY ANALYSIS REPORT

Gateway South Building 4

ENERGY ANALYSIS

CITY OF SAN BERNARDINO

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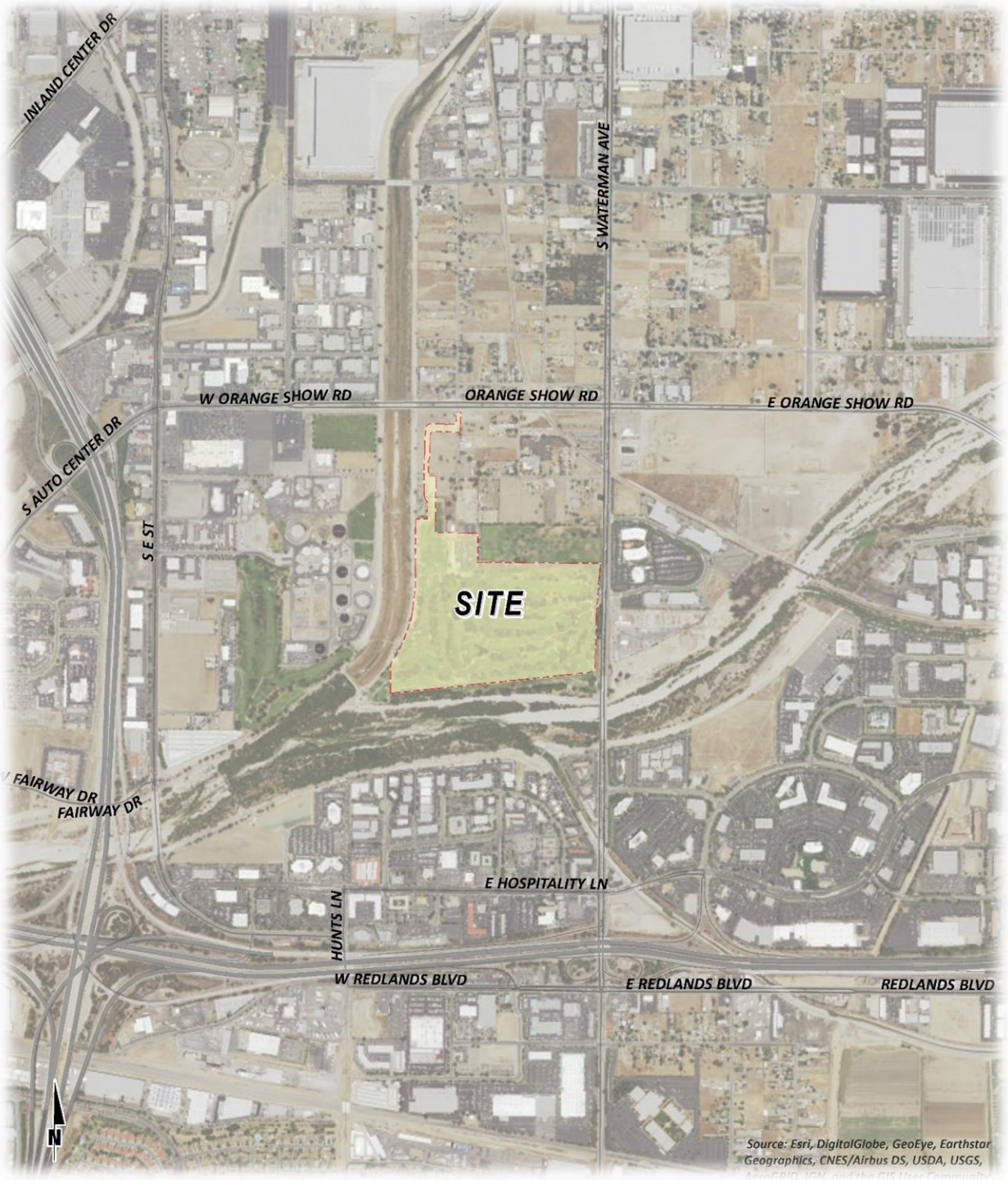

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LIST OF ABBREVIATED TERMS

(1)	Reference
AQIA	Air Quality Impact Analysis
ARB	Air Resources Board
CalEEMod	California Emissions Estimator Model
CARB	California Air Resources Board
CEC	California Energy Commission
CPUC	California Public Utilities Commission
EVs	Electric Vehicles
EMFAC	Emissions Factor
FERC	Federal Energy Regulatory Commission
GPA	General Plan Amendment
GWh	Gigawatt Hour
HHD	Heavy-Heavy Duty
ISO	Independent Service Operator
ISTEA	Intermodal Surface Transportation Efficiency Act
ITE	Institute of Transportation Engineers
LHD	Light-Heavy Duty
MHD	Medium-Heavy Duty
MPG	Miles Per Gallon
MPO	Metropolitan Planning Organization
Project	Gateway South Building 4
SCE	Southern California Edison
SoCalGas	Southern California Gas
SF	Square Feet
TEA-21	Transportation Equity Act for the 21st Century
VMT	Vehicle Miles Traveled

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1 INTRODUCTION

This report presents the results of the air energy analysis prepared by Urban Crossroads, Inc., for the proposed Gateway South Building 4 (referred to as "Project"). The purpose of this report is to ensure that energy implication is considered by the City of San Bernardino, 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 Gateway South Building 4 site is generally located south of Dumas Street and west of Waterman Avenue in the City of San Bernardino, as shown on Exhibit 1-A.

1.2 STUDY AREA

The Project site is currently occupied by the San Bernardino Public Golf Course. Existing structures on-site totaling approximately 17,575 square feet (s.f) will be demolished prior to building construction. The Project site is bordered by the San Bernardino County Flood Control Channel to the west, a golf driving range that is the site of a future industrial warehouse building to the north, various office industrial land uses to the east, and the Santa Ana River to the south.

1.3 PROJECT DESCRIPTION

The Project is proposed to consist of a total of 1,063,853 square feet (sf) of high-cube warehouse/distribution center use (as a conservative measure, the analysis herein evaluates 1,064,880 sf of high-cube warehouse/distribution center use; therefore, the impacts disclosed herein are slightly overstated), as shown on Exhibit 1-B. For the purposes of this energy analysis, the Project is anticipated to be developed in a single phase with an anticipated opening year of 2018.

The Project also provides for a proposed off-site private street access easement extending from the Project site's northern boundary. The easement would extend to Dumas Street, then north and east to existing Washington Avenue, then north to intersect with Orange Show Road. Interim roadway improvements would occur within this easement to provide ingress and egress between the Project site and Orange Show Road.

As part of the Project's design, all on-site outdoor cargo handling equipment (CHE) (including yard trucks, hostlers, yard goats, pallet jacks, forklifts, and other on-site equipment) will be powered by non-diesel fueled engines (e.g., electric or natural gas) and all on-site indoor forklifts shall be electric.

1.4 SUMMARY OF FINDINGS

For new development such as that proposed by the Gateway South Building 4, compliance with California Building Standards Code Title 24 energy efficiency requirements (CalGreen), combined with the mitigation measures that are recommended by the Gateway South Building 4 Air Quality Impact Analysis, Greenhouse Gas Analysis, and Health Risk Assessment, are considered demonstrable evidence of efficient use of energy. As discussed below, the Project would provide for, and promote, energy efficiencies beyond those required under other applicable federal and State of California standards and regulations, and in so doing would meet or exceed all California Building Standards Code Title 24 standards. Moreover, energy consumed by the Project's operation is calculated to be comparable to, or less than, energy consumed by other industrial warehouse uses of similar scale and intensity that are constructed and operating in California. On this basis, the Project would not result in the inefficient, wasteful, or unnecessary consumption of energy. Further, the Project would not cause or result in the need for additional energy producing facilities or energy delivery systems.

1.4 CONSTRUCTION-SOURCE AIR POLLUTANT EMISSIONS MITIGATION MEASURES

The Project Air Quality Impact Analysis (AQIA) establishes construction activity mitigation measures that would globally reduce air pollutant emissions generated by subsequent development proposals within the Project site. Although these measures could act to reduce energy consumption, there is insufficient data to support any reductions associated with the construction activity mitigation measures identified in the AQIA. Thus, as a conservative measure no reduction in energy consumption are taken for construction activity mitigation measures identified in the AQIA.

1.5 OPERATIONAL-SOURCE MITIGATION MEASURES

Measures listed below would provide for generalized reductions in Project operational energy demand. Notwithstanding, these reductions cannot be definitively quantified; and in any case, such reductions as may be realized would not materially affect the analyses or conclusions presented herein. For the purposes of this analysis, unmitigated and mitigated area-source air pollutant emissions generated by the Project are considered substantively equal. As a conservative measure, no reduction for any of the measures listed under MM AQ-2 through MM AQ-5 is taken in the analysis.

MM AQ-2

- Up to three electric-vehicle charging stations will be provided.
- Solar or light-emitting diodes (LEDs) lights shall be installed for outdoor lighting.
- Any yard trucks used on-site to move trailers in or around the loading areas shall be electric or natural gas.
- Service equipment, such as forklifts, used at the Project site shall be electric.
- Applicant shall provide bicycle racks in convenient locations to facilitate bicycle access to the Project site.

- Applicant shall use low-VOC emission paints consistent with SCAQMD standards.
- Applicant must design and construct the roof of the buildings to accommodate maximally sized photovoltaic (PV) solar arrays taking into consideration limitations imposed by other rooftop equipment, roof warranties, building and fire code requirements, and other physical or legal limitations. Applicant must develop each Project building with the necessary electrical system and other infrastructure to accommodate maximally sized PV arrays in the future. The electrical system and infrastructure must be clearly labeled with noticeable and permanent signage which informs future tenant/purchasers of the existence of this infrastructure.
- Applicant shall design and construct the Project to achieve the equivalent of an LEED™ "Certified" rating under the current U.S. Green Building Council standards, and will be built in compliance with those standards. To achieve this, the design, construction, and operation of the proposed Project shall incorporate a series of green building strategies, which shall be selected and implemented in the sole discretion of the Applicant. Upon completion of the Project, Applicant shall provide the City with documentation demonstrating that the Project has achieved LEED Certified equivalency. The Project shall not be required to obtain USGBC certification.

MM AQ-3:

Prior to the issuance of building permits, the Project applicant shall ensure that the Project is designed to achieve efficiency equal to or exceeding then incumbent (2016 or later) California Building Code Title 24 requirements.

MM AQ-4:

To reduce water consumption and the associated energy-usage, the Project will be designed to comply with the mandatory reductions in indoor water usage contained in the incumbent CalGreen Code (1) and any mandated reduction in outdoor water usage contained in the City's water efficient landscape requirements. Additionally, the Project shall implement the following:

- Landscaping palette emphasizing drought tolerant plants;
- Use of water-efficient irrigation techniques;
- U.S. EPA Certified WaterSense labeled or equivalent faucets, high-efficiency toilets (HETs), and water-conserving shower heads.

MM AQ-5:

The truck access gates and loading docks within the truck court on the Project site shall be posted with signs which state:

a) Truck drivers shall turn off engines when not in use;

b) Truck drivers shall shut down the engine after 300 seconds of continuous idling operation once the vehicle is stopped, the transmission is set to "neutral" or "park", and the parking brake is engaged (2). [1]; and

c) Telephone numbers of the building facilities manager and the CARB to report violations.

[1] While restricted idling is required per MM AQ-1, the analysis presented here takes no quantified credit or reduction in emissions for restricted idling, and reflects an assumed 15-minute "worst case" idling condition.

EXHIBIT 1-A: LOCATION MAP

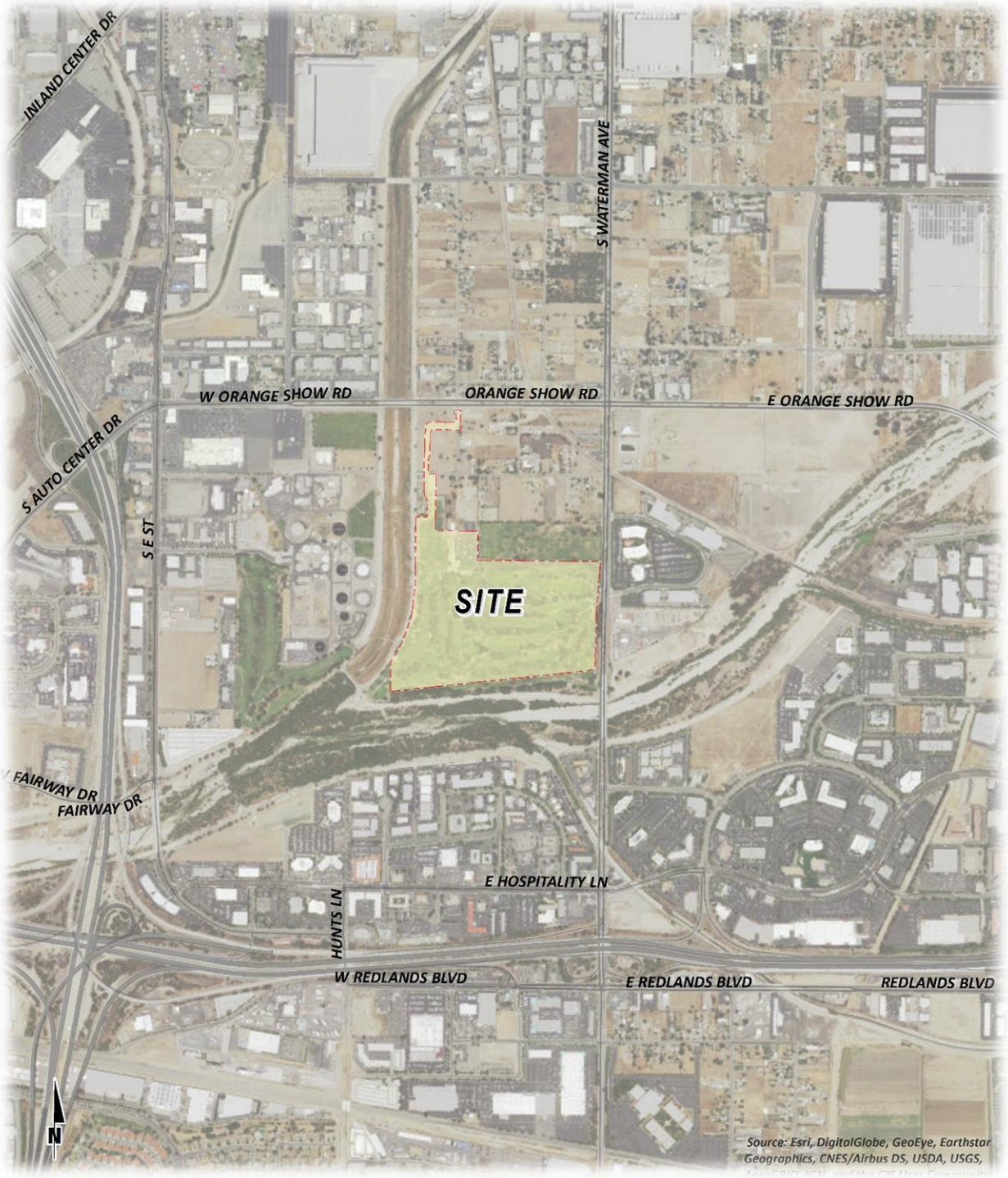
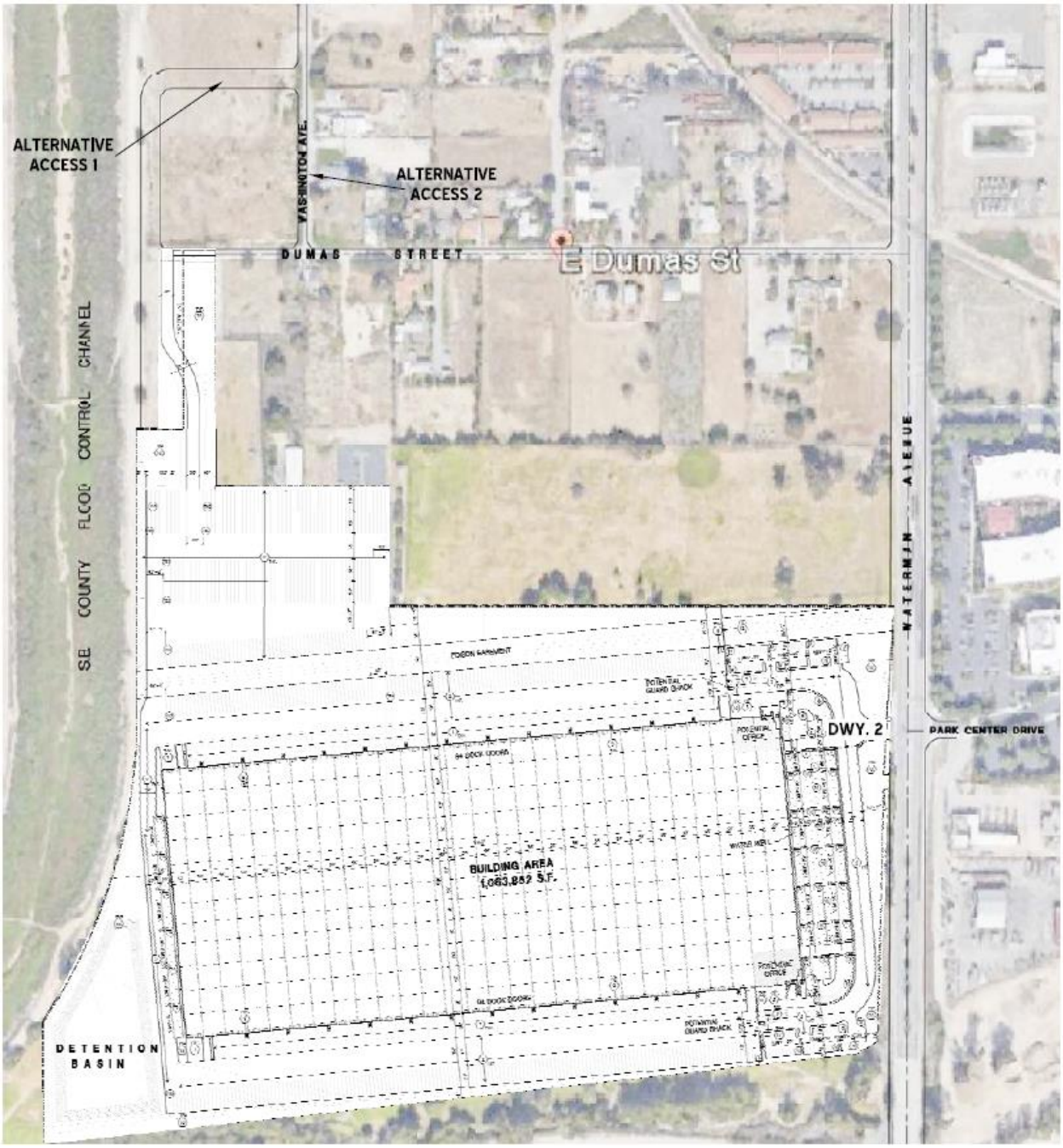


EXHIBIT 1-B: SITE PLAN



2 EXISTING CONDITIONS

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

2.1 OVERVIEW

California's estimated annual energy use as of 2015 included:

- Approximately 295,405 gigawatt hours of electricity; (3)
- Approximately 4,427 million therms natural gas (approximately 426 billion cubic feet of natural gas per day); and
- Approximately 18.5 billion gallons of transportation fuel (for the year 2014) (4).

As of 2014, the year of most recent data currently available by the United States Energy Information Administration (EIA), energy use in California by demand sector was:

- Approximately 38.7 percent transportation;
- Approximately 24.4 percent industrial;
- Approximately 18.3 percent residential; and
- Approximately 18.6 percent commercial. (5)

California's massive electricity in-state generation system generates approximately 200,000 gigawatt-hours each year and is transported over the state's 32,000 miles of transmission lines. In 2015, California produced close to 66% of the electricity it uses; the rest was imported from the Pacific Northwest (12%) and the U.S. Southwest (22%). Natural gas is the main source for electricity generation at 44% of the total in-state electric generation system power as shown in Table 2-1.

TABLE 2-1: TOTAL ELECTRICITY SYSTEM POWER (CALIFORNIA 2015)

Fuel Type	California In-State Generation (GWh)	Percent of California In-State Generation	Northwest Imports (GWh)	Southwest Imports (GWh)	California Power Mix (GWh)	Percent California Power Mix
Coal	538	0.30%	294	16,903	17,735	6.00%
Large Hydro	11,569	5.90%	2235	2,144	15,948	5.40%
Natural Gas	117,490	59.90%	49	12,211	129,750	44.00%
Nuclear	18,525	9.40%	0	8,726	27,251	9.20%
Oil	54	0.0%	0	0	54	0.00%
Other	14	0.0%	0	0	14	0.00%
Renewables	48,005	24.50%	12,321	4,455	64,781	21.90%
Biomass	6,362	3.20%	1,143	42	7,546	2.60%
Geothermal	11,994	6.10%	132	757	12,883	4.40%
Small Hydro	2,423	1.20%	191	2	2,616	0.90%
Solar	15,046	7.70%	0	2,583	17,629	6.00%
Wind	12,180	6.20%	10,855	1,072	24,107	8.20%
Unspecified Sources of Power	N/A	N/A	20,901	18,972	39,873	13.50%
Total	**196,195**	**100.00%**	**35,800**	**63,410**	**395,405**	**100.00%**

Source: http://energyalmanac.ca.gov/electricity/total_system_power.html

A 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:

- Excluding federal offshore areas, California ranked third in the nation in crude oil production in 2015, despite an overall decline in production rates since the mid-1980s.
- California also ranked third in the nation in refining capacity as of January 2016, with a combined capacity of almost 2 million barrels per calendar day from its 18 operable refineries.
- In 2014, California's per capita energy consumption ranked 49th in the nation; the state's low use of energy was due in part to its mild climate and its energy efficiency programs.
- In 2014, California ranked fourth in the nation in conventional hydroelectric generation, second in net electricity generation from other renewable energy resources, and first as a producer of electricity from geothermal energy.
- In 2015, California ranked 15th in net electricity generation from nuclear power after one of its two nuclear plants was taken out of service in June 2013 (the San Onofre Nuclear Generating Station).
- Average site electricity consumption in California homes is among the lowest in the nation (6.9 megawatt hours per year), according to EIA's Residential Energy Consumption Survey. (6)

As indicated above, California is one of the nation's leading energy-producing states, and California per capita energy use is among the nation's most efficient. Given the nature of the proposed Project being an industrial development, the remainder of this discussion will focus on

the three sources of energy that are most relevant to the project—namely, electricity and natural gas for industrial uses, and transportation fuel for vehicle trips associated with industrial 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 ISO studies had revealed the extent to which the Los Angeles Basin and San Diego 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 (2013 IEPR) after a collaborative process with other energy agencies, utilities, and air districts (7). If the resource development outlined in the preliminary plan continues as detailed, reliability in Southern California would likely be assured; however, tight resource margins have led energy agencies and the ARB to develop a contingency plan. This contingency plan was discussed at a public workshop in Los Angeles on August 20, 2014, and is detailed within this Section (8).

Electricity would be provided to the Project by Southern California Edison (SCE). SCE provides electric power to more than 14 million persons in 15 counties and in 180 incorporated cities, within a service area encompassing approximately 50,000 square miles. 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. (9)

California's electricity industry is an organization of traditional utilities, private generating companies, and state agencies, each with a variety of roles and responsibilities to ensure that electrical power is provided to consumers. The California Independent Service Operator ("ISO") is a nonprofit public benefit corporation, and is the impartial operator of the State's wholesale power grid and is charged with maintaining grid reliability, and to direct uninterrupted electrical energy supplies to California residential and commercial users. While utilities [such as SCE] 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 sufficient 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. (10)

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, transmission owners (investor-owned utilities such as SCE) 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.

Table 2-2 identifies SCE's specific proportional shares of electricity sources in 2014. As indicated in Table 2-2, shows the 2014 SCE Power Mix has renewable energy at 24% of the overall energy resources. Geothermal is remaining steady at 9%, same as in 2013 and 2012. Wind power is remaining steady at 10%, same as in 2013 and increasing from 8% in 2012. Large hydro is at 3%, having fallen from 4% in 2013 and 2012. Solar energy is at 4%, having increased from 1% in 2013 and 2012. Biomass and waste has remained steady at 1%. Coal is at 0%, having decreased significantly from 6% in 2013 and from 7% in 2012. Natural gas is at 27%, decreasing slightly from 28% in 2013.

TABLE 2-2: SCE 2014 POWER CONTENT MIX

Energy Resources	2014 SCE Power Mix
Eligible Renewable	**24%**
Biomass & waste	1%
Geothermal	9%
Small Hydroelectric	0%
Solar	4%
Wind	10%
Coal	**0%**
Large Hydroelectric	**3%**
Natural Gas	**27%**
Nuclear	**6%**
Other	**0%**
Unspecified Sources of power*	40%
Total	**100%**

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

2.3 NATURAL GAS

Natural gas would be provided to the Project by The Gas Company (Southern California Gas, SoCalGas). The following summary of natural gas resources and service providers, delivery systems, and associated regulation is excerpted from information provided by the California Public Utilities Commission (CPUC).

> "The California Public Utilities Commission (PUC) 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.

The vast majority of California's natural gas customers are residential and small commercial customers, referred to as "core" customers, who accounted for approximately 32% of the natural gas delivered by California utilities in 2012. Large consumers, like electric generators and industrial customers, referred to as "noncore" customers, accounted for approximately 68% of the natural gas delivered by California utilities in 2012.

The PUC regulates the California utilities' natural gas rates and natural gas services, including in-state transportation over the utilities' transmission and distribution pipeline systems, storage, procurement, metering and billing. Most of the natural gas used in California comes from out-of-state natural gas basins. In 2012, California customers received 35% of their natural gas supply from basins located in the Southwest, 16% from Canada, 40% from the Rocky Mountains, and 9% from basins located within California. California gas utilities may soon also begin receiving biogas into their pipeline systems.

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 consumers are the Gas Transmission Northwest Pipeline, Kern River Pipeline, Transwestern Pipeline, El Paso Pipeline, the Ruby Pipeline, Questar Southern Trails and Mojave Pipeline. 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, the PUC often participates in FERC regulatory proceedings to represent the interests of California natural gas consumers.

Most of the natural gas transported via the interstate pipelines, as well as some of the California-produced natural gas, is delivered into the PG&E and SoCalGas intrastate natural gas transmission pipeline systems (commonly referred to as California's "backbone" natural gas pipeline system). Natural gas on the utilities' backbone pipeline systems is then delivered into the local transmission and distribution pipeline systems, or to natural gas storage fields. Some large noncore customers take natural gas directly off the high pressure backbone pipeline systems, while core customers and other noncore customers take natural gas off the utilities' distribution pipeline systems. The PUC has regulatory jurisdiction over 150,000 miles of utility-owned natural gas pipelines, which transported 82% of the total amount of natural gas delivered to California's gas consumers in 2012.

SDG&E and Southwest Gas' southern division are wholesale customers of SoCalGas, and currently receive all of their natural gas from the SoCalGas system (Southwest Gas also provides natural gas distribution service in the Lake Tahoe area). Some other municipal wholesale customers are the cities of Palo Alto, Long Beach, and Vernon, which are not regulated by the CPUC.

Some of the natural gas delivered to California customers may be delivered directly to them without being transported over the regulated utility systems. For example, the Kern

River/Mojave pipeline system can deliver natural gas directly to some large customers, "bypassing" the utilities' systems. Much of California-produced natural gas is also delivered directly to large consumers.

PG&E and SoCalGas own and operate several natural gas storage fields that are located in northern and southern California. 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 natural gas demand and allow California natural gas customers to secure natural gas supplies more efficiently. (A portion of the Gill Ranch facility is owned by PG&E).

California's regulated utilities do not own any natural gas production facilities. All of the natural gas sold by these utilities must be purchased from suppliers and/or marketers. The price of natural gas sold by suppliers and marketers was deregulated by the FERC in the mid-1980's and is determined by "market forces." However, the PUC decides whether California's utilities have taken reasonable steps in order to minimize the cost of natural gas purchased on behalf of their core customers" (11).

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 PUC 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 attract additional vehicle trips with resulting consumption of energy resources, predominantly gasoline and diesel fuel. As of 2012, there are more than 27 million registered vehicles in California, and those vehicles consume an estimated 18 billion gallons of fuel each year. Gasoline (and other vehicle fuels) are commercially-provided commodities, and would be available to the Project patrons and employees via commercial outlets.

California's on-road transportation system includes 170,000 miles of highways and major roadways, more than 26 million passenger vehicles and light trucks, and almost 1 million medium- and heavy-duty vehicles. The most recent data available (2014) shows the transportation sector emits 37 percent of the total greenhouse gases in the state and about 83 percent of smog-forming oxides of nitrogen (NOx) (12). While gasoline consumption has been declining since 2008 it is still by far the dominant fuel. Petroleum comprises about 92 percent of all transportation energy use, excluding fuel consumed for aviation and most marine vessels. Nearly 18 billion gallons of on-highway fuel are burned each year, including 14.5 billion gallons of gasoline (including ethanol) and 3.4 billion gallons of diesel fuel (including biodiesel and renewable diesel). In 2013, Californians also used 174 million therms of natural gas as a transportation fuel, or the equivalent of 142 million gallons of gasoline, and 841,345 megawatt hours of electricity for transportation, or about the equivalent of 25 million gallons of gasoline.

For 2013, combined alternative fuel use in California was slightly more than 7 percent of total transportation fuel use (13).

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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 are three federal agencies with substantial influence over energy policies and programs. On the state level, the PUC and the California Energy Commissions (CEC) are two agencies with authority over different aspects of energy. Relevant federal and state energy-related laws and plans are summarized below. Project consistency with applicable federal and state regulations is also presented in *italicized* text.

3.1 FEDERAL REGULATIONS

Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA)

The Intermodal Surface Transportation Efficiency Act of 1991 (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. *Transportation and access to the Project site is provided primarily 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.*

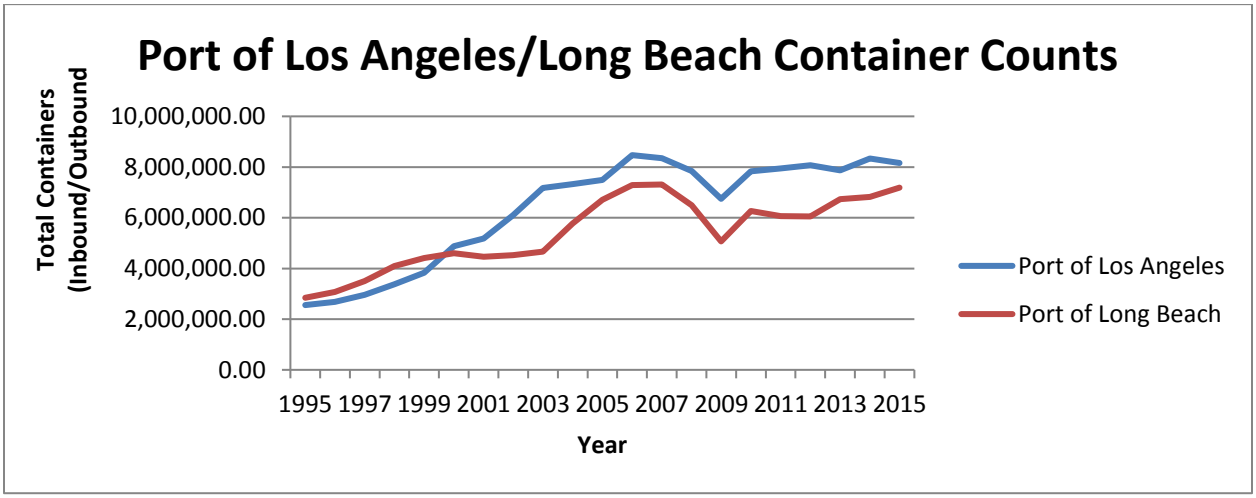
The Transportation Equity Act for the 21st Century (TEA-21)

The Transportation Equity Act for the 21st Century (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*. The Project site is located along major transportation corridors with proximate access to the Interstate freeway system. The site selected for the Project facilitates access, acts to reduce 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.*

As shown on Exhibit 3-A, data from both the Port of Los Angeles and the Port of Long Beach shows that the receiving and shipping of containers have had a stable trend since the recession that hit in 2007 (14) (15)*. Therefore, truck transport from the ports is relatively stable and a Project of this type would not be increasing the amount of truck trips and consequently VMT than what would normally occur within the basin. As such, the estimation of the Gateway South Building 4 Project's vehicular-source emissions is likely overstated in that no credit for, or reduction in, emissions is assumed based on diversion of existing trips.*

Additionally, the Southern California Association of Governments' (SCAG's) 2012-2035 Regional Transportation Plan / Sustainable Communities Strategy (RTP/SCS) includes information on goods movement that clearly illustrates that of the port-related trips within the SCAG region, more than 85% have an origin or destination within Los Angeles County. As a result, the Project would serve to meet this demand and not be expected to increase trips or VMT in the air basin.

EXHIBIT 3-A: PORT OF LOS ANGELES/PORT OF LONG BEACH CONTAINER COUNTS



3.2 CALIFORNIA REGULATIONS

Integrated Energy Policy Report

Senate Bill 1389 (Bowen, Chapter 568, Statutes of 2002) requires the California Energy Commission 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 § 25301a]). The Energy Commission prepares these assessments and associated policy recommendations every two years, with updates in alternate years, as part of the Integrated Energy Policy Report.

The 2014 Integrated Energy Policy Report Update (2014 IEPR Update) focused on next steps for transforming transportation energy use in California. The 2014 Integrated Energy Policy Report Update provides the results of the California Energy Commission's assessments of a variety of

energy issues currently facing California. These issues include the role of transportation in meeting state climate, air quality, and energy goals; the Alternative and Renewable Fuel and Vehicle Technology Program; current and potential funding mechanisms to advance transportation policy; the status of statewide plug-in electric vehicle infrastructure; challenges and opportunities for electric vehicle infrastructure deployment; measuring success and defining metrics within the Alternative and Renewable Fuel and Vehicle Technology Program; market transformation benefits resulting from Alternative and Renewable Fuel and Vehicle Technology Program investments; the state of hydrogen, zero-emission vehicle, biofuels, and natural gas technologies over the next 10 years; transportation linkages with natural gas infrastructure; evaluation of methane emissions from the natural gas system and implications for the transportation system; changing trends in California's sources of crude oil; the increasing use of crude-by-rail in California; the integration of environmental information in renewable energy planning processes; an update on electricity reliability planning for Southern California energy infrastructure; and an update to the electricity demand forecast.

The 2015 Integrated Energy Policy Report (2015 IEPR) was published in February 2016 and continues to work towards improving electricity, natural gas, and transportation fuel energy use in California. The 2015 IEPR focuses on a variety of topics such as building efficiency standards; benchmarking under the Assembly Bill 758 Action Plan; the impact of drought on California's energy system; achieving 50 percent renewables by 2030; Renewable Action Plan status; the California Energy Demand Forecast; methane emissions; climate change vulnerability and adaptation options; an update on electricity infrastructure in Southern California; the California Independent System Operator energy imbalance market; and an update on California's nuclear plants.

The Final 2016 Integrated Energy Policy Report Update (Final 2016 IEPR Update) was released on February 28, 2017. The report examines how the state is transforming its electricity sector and identifies other improvements that are still needed to achieve the state's energy and climate policy goals. The report covers a broad range of topics, including the environmental performance of the electricity generation system, landscape-scale planning, the response to the gas leak at the Aliso Canyon natural gas storage facility, transportation fuel supply reliability issues, updates on the Southern California electricity reliability, methane leakage, climate adaptation activities for the energy sector, climate and sea level rise scenarios, and the *California Energy Demand Forecast* (16).

State of California Energy Action Plan

The CPUC, CEC, and Conservation Financing Authority (CFA) is responsible for preparing the State Energy Action Plan, which identifies Specific Action Areas to meet California's electricity and natural gas needs. To further this policy, the plan identifies a number of Specific Action Areas, such as Energy Efficiency and Transportation Demand and Infrastructure. Specific Energy Efficiency strategies include compliance with cost effective energy efficient building codes, appliance standard, and utility energy efficiency programs. Specific Transportation Demand and Infrastructure strategies include reducing the VMT traveled, compliance with Low Carbon Fuel

Standards and the increasing penetration of plug-in hybrid electric vehicles and all-electric vehicles.

The Project shall comply with the applicable energy efficiency building codes, appliance standards, and utility energy efficiency programs required for the Project. The Project site is located along major transportation corridors with proximate access to the Interstate freeway system. The site selected for the Project facilitates access and may reduce vehicle miles traveled through its proximate location to the Ports.[1] The Project shall comply with mandatory state measures, such as Low Carbon Fuel Standards. As a Project design feature, the Project shall provide preferential parking for low-emitting, fuel-efficient, and carpool/van vehicles. Furthermore, the Project shall install and provide for future vehicle charging stations consistent to CalGreen Standards.[2] The Project therefore supports, is consistent with, and would not otherwise interfere with, nor obstruct implementation of the State of California Energy Action Plan.

California Code Title 24, Part 6, Energy Efficiency Standards

California Code Title 24, Part 6 (also referred to as the California Energy Code), was promulgated by the CEC in 1978 in response to a legislative mandate to create uniform building codes to reduce California's energy consumption. To these ends, the California Energy Code provides energy efficiency standards for residential and nonresidential buildings. According to the CEC, the Energy Commission's energy efficiency standards have saved Californians billions in reduced electricity bills since 1977. (17)

California's building efficiency standards are updated on an approximately three-year cycle. The 2016 Standards have continued to improve upon the prior 2013 Standards for new construction of, and additions and alterations to, residential and nonresidential buildings. The 2016 Standards went into effect on January 1, 2017, following approval of the California Building Standards Commission.

The 2016 Energy Efficiency Standards in their entirety may be reviewed at: http://www.energy.ca.gov/title24/2016standards/. The 2016 Energy Efficiency Standards may also be reviewed at the California Energy Commission, 1516 Ninth Street, MS-37, Sacramento, CA 95814-5512. The Project would be designed, constructed and operated so as to meet or exceed incumbent Title 24 Energy Efficiency Standards. *On this basis, the Project is determined to be consistent with, and would not interfere with, nor otherwise obstruct implementation of Title 24 Energy Efficiency Standards.*

1 The Project is located at a proximate location to the Ports and would incur fewer VMT than if the Project were to be constructed in a location further from the Ports.

2 PDF 1-3 and PDF 1-4

4 PROJECT ENERGY DEMANDS AND ENERGY EFFICIENCY MEASURES

4.1 EVALUATION CRITERIA

In compliance with Appendix F of the *State CEQA Guidelines,* (18) this report analyzes the project's anticipated energy use to determine if the Project would:

- Result in the wasteful, inefficient or unnecessary consumption of energy; or
- Result in a substantial increase in demand or transmission service, resulting in the need for new or expanded sources of energy supply or new or expanded energy delivery systems or infrastructure.

In addition, Appendix F of the State CEQA Guidelines 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.

4.2 METHODOLOGY

Information from the CalEEMod 2016.3.1 outputs for the Gateway South Building 4 Air Quality Impact Analysis, Urban Crossroads (2017) (19) was utilized in this analysis, detailing Project related construction equipment, transportation energy demands, and facility energy demands. These outputs can be referenced in Appendix 3.1.

4.3 CONSTRUCTION ENERGY DEMANDS

4.3.1 CONSTRUCTION EQUIPMENT ELECTRICITY USAGE ESTIMATES

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. Based on the 2015 National Construction Estimator, Richard Pray (2015) (20), the typical power cost per 1,000 square feet of building construction per month is estimated to be $2.28. For the Gateway South Building 4 development, the Project plans to develop 1,064,880 square feet of building space over the course of 18 months. Based on Table 4-1, the total power cost of the on-site electricity usage during the construction of the proposed Project is estimated to be approximately $43,702.68. Additionally, as of June 1, 2016, SCE's general service rate schedule (GS-1) for an industrial land use is $.08 per kWh of electricity (21). As shown on Table 4-2, the total electricity usage from on-site Project construction related activities is estimated to be approximately 546,283 kWh.

TABLE 4-1: PROJECT CONSTRUCTION POWER COST

Power Cost (per 1,000 SF of building per month of construction)	**Total Building Size** (1,000 SF)	**Construction Duration** (months)	**Total Project Construction Power Cost**
$2.28	1,064.880	18	$43,702.68

TABLE 4-2: PROJECT CONSTRUCTION ELECTRICITY USAGE

Cost per kWh	**Total Project Construction Electricty Usage (kWh)**
$0.08	546,283

[1]Assumes the Project will be under the GS-1 General Industrial service rate under SCE

4.3.2 CONSTRUCTION EQUIPMENT FUEL ESTIMATES

Fuel consumed by construction equipment would be the primary energy resource expended over the course of Project construction. Project construction activity timeline estimates, construction equipment schedules, equipment power ratings, load factors, and associated fuel consumption estimates are presented in Table 4-3. Eight-hour daily use of all equipment is assumed. The aggregate fuel consumption rate for all equipment is estimated at 18.5 hp-hr-gal., obtained from California Air Resources Board (CARB) 2013 Emissions Factors Tables and cited fuel consumption rate factors presented in Table D-24 of the Moyer guidelines. (22) For the purposes of this analysis, that the calculations are based on all construction equipment being diesel-powered which is standard practice consistent with industry standards. Diesel fuel would be supplied by existing commercial fuel providers serving the County and region.

As presented in Table 4-3, Project construction activities would consume an estimated 106,722 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.

TABLE 4-3: CONSTRUCTION EQUIPMENT FUEL CONSUMPTION ESTIMATES

Activity/Duration	Equipment	HP Rating	Quantity	Usage Hours	Load Factor	HP-hrs/day	Total Fuel Consumption (gal. diesel fuel)
Demolition (30 days)	Concrete/Industrial Saws	81	1	8	0.73	473	767
	Off-Highway Trucks	189	1	8	0.50	756	1,226
	Excavators	158	1	8	0.38	480	779
	Rubber Tired Dozers	247	1	8	0.40	790	1,282
Site Preparation (40 days)	Graders	187	1	8	0.41	613	1,326
	Off-Highway Trucks	189	2	8	0.50	1,512	3,269
	Rubber Tired Dozers	247	2	8	0.40	1,581	3,418
	Tractors/Loaders/Backhoes	97	1	8	0.37	287	621
Grading (55 days)	Graders	187	1	8	0.41	613	1,824
	Off-Highway Trucks	189	2	8	0.50	1,512	4,495
	Rubber Tired Dozers	247	2	8	0.40	1,581	4,700
	Scrapers	367	8	8	0.48	11,274	33,518
	Tractors/Loaders/Backhoes	97	2	8	0.37	574	1,707
Building Construction (210 days)	Cranes	231	2	8	0.29	1,072	12,167
	Forklifts	89	5	8	0.20	712	8,082
	Generator Sets	84	2	8	0.74	995	11,290
	Off-Highway Trucks	189	1	8	0.50	756	8,582
	Welders	46	2	8	0.45	331	3,760
Architectural Coating (50 days)	Air Compressors	78	2	8	0.48	599	1,619
Paving (20 days)	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
CONSTRUCTION FUEL DEMAND (gallons diesel fuel)							***106,722***

4.3.3 CONSTRUCTION WORKER FUEL ESTIMATES

It is assumed that all construction worker trips are from light duty autos (LDA) along area roadways. With respect to estimated VMT, the construction worker trips would generate an estimated 102,109 VMT (23). Data regarding Project related construction worker trips were based on CalEEMod 2016.3.1 model defaults utilized within the Gateway South Building 4 Air Quality Impact Analysis.

Vehicle fuel efficiencies for LDA were estimated using information generated within the 2014 version of the Emissions FACtor model (EMFAC) developed by the Air Resources Board (ARB). EMFAC 2014 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 ARB to project changes in future emissions from on-road mobile sources (24). EMFAC 2014 was run for the LDA vehicle class within the California sub-area for a 2018 calendar year. Data from EMFAC 2014 is shown in Appendix 3.2.

As generated by EMFAC 2014, an aggregated fuel economy of LDAs ranging from model year 1974 to model year 2018 are estimated to have a fuel efficiency of 26.77 miles per gallon (MPG). Table 4-4 provides an estimated annual fuel consumption resulting from Project generated light duty autos related to construction worker trips. Based on Table 4-4, it is estimated that 102,109 gallons of fuel will be consumed related to construction worker trips after full construction of the proposed Project. Project construction worker trips would represent a "single-event" gasoline fuel demand and would not require on-going or permanent commitment of fuel resources for this purpose.

TABLE 4-4: CONSTRUCTION WORKER FUEL CONSUMPTION ESTIMATES

Construction Activity	Worker Trips / Day	Trip Length (miles)	Vehicle Miles Traveled	Average Vehicle Fuel Economy (mpg)	Estimated Fuel Consumption (gallons)
Demolition (30 days)	10	14.7	4,410	26.77	165
Site Preparation (40 days)	15	14.7	8,820	26.77	329
Grading (55 days)	38	14.7	30,723	26.77	1,148
Building Construction (210 days)	830	14.7	2,562,210	26.77	95,712
Architectural Coating (50 days)	166	14.7	122,010	26.77	4,558
Paving (20 days)	18	14.7	5,292	26.77	198
TOTAL CONSTRUCTION WORKER FUEL CONSUMPTION					**102,109**

4.3.4 CONSTRUCTION VENDOR/HAULING FUEL ESTIMATES

With respect to estimated VMT, the construction vendor trips would generate an estimated 671,232 VMT along area roadways (19). It is assumed that 50% of all vendor trips are from medium-heavy duty trucks (MHD) and 50% are from heavy-heavy duty trucks (HHD). It is assumed that 100% of all hauling trips are from HHD. These assumptions are consistent with the 2016.3.1 CalEEMod defaults utilized within the Gateway South Building 4 Air Quality Impact Analysis. Vehicle fuel efficiencies for MHD and HHD trucks were estimated using information generated within EMFAC 2014. For purposes of this analysis, EMFAC 2014 was run for the MHD and HHD vehicle class within the California sub-area for a 2018 calendar year. Data from EMFAC 2014 is shown in Appendix 3.2.

As generated by EMFAC 2014, an aggregated fuel economy of MHD trucks ranging from model year 1974 to model year 2018 are estimated to have a fuel efficiency of 8.17 mpg. Additionally, HHD trucks are estimated to have a fuel efficiency of 5.77 mpg.

Table 4-5 and Table 4-6 shows the estimated fuel economy of MHD and HHD trucks accessing the Project site. Based on Table 4-5 and Table 4-6, fuel consumption from construction hauling and vendor trips (medium and heavy duty trucks) will total approximately 69,510 gallons. 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 4-5: CONSTRUCTION VENDOR FUEL CONSUMPTION ESTIMATES (MHD TRUCKS) [3]

Construction Activity	Vendor Trips / Day	Trip Length (miles)	Vehicle Miles Traveled	Average Vehicle Fuel Economy (mpg)	Estimated Fuel Consumption (gallons)
Building Construction (210 days)	162	6.9	234,738	8.17	28,732

TABLE 4-6: CONSTRUCTION VENDOR FUEL CONSUMPTION ESTIMATES (HHD TRUCKS) [4]

Construction Activity	Vendor/ Hauling Trips/ Day	Trip Length (miles)	Vehicle Miles Traveled	Average Vehicle Fuel Economy (mpg)	Estimated Fuel Consumption (gallons)
Demolition (30 days)	3	6.9	552	5.77	96
Building Construction (210 days)	162	6.9	234,738	5.77	40,682

[3] Assumptions for the vendor trip length and vehicle miles traveled are consistent with 2013.2.2 model defaults utilized within the Gateway South Building 4 Air Quality Impact Analysis.

[4] Assumptions for the vendor trip length and vehicle miles traveled are consistent with 2013.2.2 model defaults utilized within the Gateway South Building 4 Air Quality Impact Analysis.

4.3.5 CONSTRUCTION ENERGY EFFICIENCY/CONSERVATION MEASURES

The equipment used for Project construction would conform to CARB regulations and CA emissions standards and would evince related fuel efficiencies. 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.

The Project would utilize construction contractors which practice compliance 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.

Additionally, certain incidental construction-source energy efficiencies would likely accrue through implementation of California regulations and best available control measures (BACM). More specifically, California Code of Regulations 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. To this end, "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 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 County building officials, and/or in response to citizen complaints.

Indirectly, construction energy efficiencies and energy conservation would be achieved for the proposed development through energy efficiencies realized from bulk purchase, transport and use of construction materials.

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 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.

4.3.6 SUMMARY

The estimated power cost of on-site electricity usage during the construction of the proposed Project is assumed to be around $43,702.68. 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 around 546,283 kWh.

Construction equipment used by the Project would result in single event consumption of approximately 106,722 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. Best available control measures inform construction equipment operators of this requirement. Enforcement of idling limitations is realized through periodic site inspections conducted by County building officials, and/or in response to citizen complaints.

Construction worker trips for full construction of the proposed Project would result in the estimated fuel consumption of 102,109 gallons of fuel. Additionally, fuel consumption from construction vendor trips (medium and heavy duty trucks) will total approximately 69,510 gallons. Diesel fuel would be supplied by County and regional commercial vendors. Indirectly, construction energy efficiencies and energy conservation would be achieved through the use of bulk purchases, transport and use of construction materials. The 2015 IEPR released by the California Energy Commission has shown that fuel efficiencies are getting better within on and off-road vehicle engines due to more stringent government requirements (25). As supported by the preceding discussions, Project construction energy consumption would not be considered inefficient, wasteful, or otherwise unnecessary.

4.4 OPERATIONAL ENERGY DEMANDS

Energy consumption in support of or related to Project operations would include transportation energy demands (energy consumed by employee and patron 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.

LIGHT DUTY AUTOS

With respect to estimated VMT, and based on the trip frequency and trip length methodologies cited in the Project's Air Quality Impact Analysis, the Project would generate an estimated 6,691,808 annual VMT along area roadways for all passenger cars with full build-out of the Project (19). As generated by EMFAC 2014, an aggregated fuel economy of LDAs ranging from model year 1974 to model year 2018 are estimated to have a fuel efficiency of 26.77 mpg. Table 4-7 provides an estimated range of annual fuel consumption resulting from Project generated LDAs. Based on Table 4-7, it is estimated that 249,974 gallons of fuel will be consumed from Project generated LDA trips.

TABLE 4-7: PROJECT-GENERATED PASSENGER CAR TRAFFIC ANNUAL FUEL CONSUMPTION

Annual Vehicle Miles Traveled	Average Vehicle Fuel Economy (mpg)	Estimated Annual Fuel Consumption (gallons)
6,691,808	26.77	249,974

LIGHT-HEAVY DUTY TRUCKS

With respect to estimated VMT, and based on the trip frequency and trip length methodologies cited in the Project's Air Quality Impact Analysis, the Project would generate an estimated 2,186,032 annual VMT along area roadways for all LHD trucks with full build-out of the Project (19). As generated by EMFAC 2014, an aggregated fuel economy of LHD trucks ranging from model year 1974 to model year 2018 are estimated to have a fuel efficiency of 12.94 mpg. Table 4-8 provides an estimated range of annual fuel consumption resulting from Project generated LHD trucks. Based on Table 4-8, it is estimated that 168,936 gallons of fuel will be consumed from Project generated LHD truck trips.

TABLE 4-8: PROJECT-GENERATED LHD TRUCK TRAFFIC ANNUAL FUEL CONSUMPTION

Annual Vehicle Miles Traveled	Average Vehicle Fuel Economy (mpg)	Estimated Annual Fuel Consumption (gallons)
2,186,032	12.94	168,936

MEDIUM-HEAVY DUTY TRUCKS

With respect to estimated VMT, and based on the trip frequency and trip length methodologies cited in the Project's Air Quality Impact Analysis, the Project would generate an estimated 1,752,398 annual VMT along area roadways for all MHD trucks with full build-out of the Project (19). As generated by EMFAC 2014, an aggregated fuel economy of MHD trucks ranging from model year 1974 to model year 2018 are estimated to have a fuel efficiency of 8.17 mpg. Table 4-9 provides an estimated range of annual fuel consumption resulting from Project generated MHD trucks. Based on Table 4-9, it is estimated that 214,492 gallons of fuel will be consumed from Project generated MHD truck trips.

TABLE 4-9: PROJECT-GENERATED MHD TRUCK TRAFFIC ANNUAL FUEL CONSUMPTION

Annual Vehicle Miles Traveled	Average Vehicle Fuel Economy (mpg)	Estimated Annual Fuel Consumption (gallons)
1,752,398	8.17	214,492

HEAVY-HEAVY DUTY TRUCKS

With respect to estimated VMT, and based on the trip frequency and trip length methodologies cited in the Project's Air Quality Impact Analysis, the Project would generate an estimated 5,984,548 annual VMT along area roadways for all HHD trucks with full build-out of the Project (19). As generated by EMFAC 2014, an aggregated fuel economy of HHD trucks ranging from model year 1974 to model year 2018 are estimated to have a fuel efficiency of 5.77 mpg. Table 4-10 provides an estimated range of annual fuel consumption resulting from Project generated HHD trucks. Based on Table 4-10, it is estimated that 1,037,183 gallons of fuel will be consumed from Project generated HHD truck trips.

TABLE 4-10: PROJECT-GENERATED HHD TRUCK TRAFFIC ANNUAL FUEL CONSUMPTION

Annual Vehicle Miles Traveled	Average Vehicle Fuel Economy (mpg)	Estimated Annual Fuel Consumption (gallons)
5,984,548	5.77	1,037,183

As summarized on Table 4-11, the Project will result in 16,614,786 annual VMT and an estimated annual fuel consumption of 1,670,585 gallons of fuel.

TABLE 4-11: PROJECT-GENERATED TRAFFIC ANNUAL FUEL CONSUMPTION (ALL VEHICLES)

Vehicle Type	Annual Miles Traveled	Estimated Annual Fuel Consumption (gallons)
Light Duty Autos	6,691,808	249,974
LHD Trucks	2,186,032	168,936
MHD Trucks	1,752,398	214,492
HHD Trucks	5,984,548	1,037,183
Total (All Vehicles)	16,614,786	**1,6701,585**

4.4.2 FACILITY ENERGY DEMANDS

Project building operations and Project site maintenance activities would result in the consumption of natural gas and electricity. Natural gas would be supplied to the Project by The Gas Company; electricity would be supplied to the Project by Southern California Edison. Annual natural gas and electricity demands of the Project are summarized in Table 4-12.

Energy use in buildings is divided into energy consumed by the built environment and energy consumed by uses that are independent of the construction of the building such as in plug-in appliances. In California, the California Building Standards Code Title 24 governs energy consumed by the built environment, mechanical systems, and some types of fixed lighting (26).

Non-building energy use, or "plug-in" energy use can be further subdivided by specific end-use (refrigeration, cooking, appliances, etc.).

TABLE 4-12: PROJECT ANNUAL OPERATIONAL ENERGY DEMAND SUMMARY

Natural Gas Demand	kBTU/year
Parking Lot	0
Unrefrigerated Warehouse	2,076,520
Total Project Natural Gas Demand	**2,076,520**

Electricity Demand	kWh/year
Parking Lot	801,504
Unrefrigerated Warehouse	2,545,060
Total Project Electricity Demand	**3,346,564**

4.4.3 Operational Energy Efficiency/Conservation Measures

Also, noted in the following discussions, 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 Code).

The Project would also not result in a substantial increase in demand or transmission service, resulting in the need for new or expanded sources of energy supply or new or expanded energy delivery systems or infrastructure.

Enhanced Vehicle Fuel Efficiencies

Estimated annual fuel consumption estimates presented previously in Table 4-11 represent likely potential maximums that would occur in 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. Although the current Administration and EPA chief are calling for a rollback of the federal CAFÉ fuel economy standards, vehicles accessing the Project site would be under the jurisdiction of the ARB and would be required to meet California's stringent fuel economy standards which equal or exceed any federal mandates.

4.5 Summary

4.5.1 Transportation Energy Demands

Annual vehicular trips and related VMT generated by the Project would result in an estimated 249,974 gallons of fuel consumption per year for LDAs. Additionally, the Project would result in an estimated 168,936 gallons of fuel consumption per year for LHD trucks. In regards to MHD trucks, the Project would result in an estimated 214,492 gallons of fuel consumption per year.

For HHD trucks an estimated 1,037,183 gallons of fuel consumption per year is estimated for the year 2018. The total estimated annual fuel consumption from Project generated VMT would result in a fuel demand of 1,670,585 gallons of fuel.

Fuel would be provided by current and future commercial vendors. Trip generation and VMT generated by the Project are consistent with other warehouse uses of similar scale and configuration, as reflected respectively in the Institute of Transportation Engineers (ITE) Trip Generation Manual (9th Ed., 2012); and California Emissions Estimator Model (CalEEMod) v2016.3.1. That is, the Project does not propose uses or operations that would inherently result in excessive and wasteful vehicle trips and VMT, nor associated excess and wasteful vehicle energy consumption.

Enhanced fuel economies realized pursuant to federal and state regulatory actions, and related transition of LDVs and HDVs to alternative energy sources (e.g., electricity, natural gas, bio fuels, 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. As supported by the preceding discussions, Project transportation energy consumption would not be considered inefficient, wasteful, or otherwise unnecessary.

4.5.2 FACILITY ENERGY DEMANDS

Project facility operational energy demands are estimated at: 2,076,520 kBTU/year of natural gas; and 3,346,564 kWh/year of electricity. Natural gas would be supplied to the Project by The Gas Company; electricity would be supplied by Southern California Edison. The Project proposes conventional warehouse uses reflecting contemporary energy efficient/energy conserving designs and operational programs. Uses proposed by the Project are not inherently energy intensive, and the Project energy demands in total would be comparable to, or less than, other warehouse projects of similar scale and configuration as the Project would be required to adhere to the current Title 24 energy efficiency and building standards in effect at the time of building construction, additionally MM AQ-2 requires that the Project will be designed to achieve a LEED "certified" rating which would require additional contemporary energy features to be implemented.

Based on the preceding, Project facilities energy demands and energy consumption would not be considered inefficient, wasteful, or otherwise unnecessary.

4.6 CONCLUSIONS

As supported by the preceding analyses, Project construction and operations would not result in the inefficient, wasteful or unnecessary consumption of energy. Further, the energy demands of the Project can be accommodated within the context of available resources and energy delivery systems. 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. Notwithstanding, the Project proposes warehousing land use and will not have any long-term

effects on an energy provider's future energy development or future energy conservation strategies.

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6 CERTIFICATION

The contents of this air study report represent an accurate depiction of the environmental impacts associated with the proposed Gateway South Building 4 Project. The information contained in this air quality impact report is based on the best available data at the time of preparation. If you have any questions, please contact me directly at (949) 336-5987.

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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

Environmental Site Assessment – American Society for Testing and Materials • June, 2013
Planned Communities and Urban Infill – Urban Land Institute • June, 2011
Indoor Air Quality and Industrial Hygiene – EMSL Analytical • April, 2008
Principles of Ambient Air Monitoring – 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 3.1:

CALEEMOD EMISSIONS MODEL OUTPUTS

Building 4 Construction- Mitigated

San Bernardino-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	1,064.88	1000sqft	41.55	1,064,880.00	0
Parking Lot	2,277.00	Space	20.49	910,800.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	32
Climate Zone	10			**Operational Year**	2018
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	497.64	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Building 4 Construction- Mitigated - San Bernardino-South Coast County, Annual

Project Characteristics - CPUC GHG Calculator version 3c, worksheet tab "CO2 Allocations," cells AH/AQ 35-44.

Land Use - Total lot acreage: 62.04; A trailer parking space required significantly more space than one regular parking space. Therefore, for analysis purposes, 1 trailer parking=3.27 parking spaces

Construction Phase - Based on 2018 opening year and past project experience

Off-road Equipment - Based on information provided by the project engineer

Off-road Equipment - Based on information provided by the Project engineer; off-highway truck= water truck

Off-road Equipment - Off-highway trucks= water trucks

Off-road Equipment - Based on information provided by the Project engineer; off-highway truck= water truck

Off-road Equipment - Off-highway trucks= water trucks

Off-road Equipment - Based on information provided by the Project engineer; off-highway truck= water truck

Trips and VMT -

Demolition -

Grading -

Architectural Coating - Based on Rule 1113 and information provided by the Project engineer

Vehicle Trips - Construction only

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Road Dust - Construction only

Consumer Products - Construction only

Area Coating - Construction only

Landscape Equipment - Construction only

Energy Use - Construction only

Water And Wastewater - Construction only

Solid Waste - Construction only

Construction Off-road Equipment Mitigation - During site preparation and grading activity, all graders, scrapers, and rubber tired dozers shall be CARB certified tier 3 or higher

Building 4 Construction- Mitigated - San Bernardino-South Coast County, Annual

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	532,440.00	202,500.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	1,597,320.00	207,820.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblAreaCoating	ReapplicationRatePercent	10	0
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	75.00	50.00
tblConstructionPhase	NumDays	1,110.00	210.00
tblConstructionPhase	NumDays	70.00	30.00
tblConstructionPhase	NumDays	110.00	55.00
tblConstructionPhase	NumDays	75.00	20.00
tblConsumerProducts	ROG_EF	1.98E-05	0
tblConsumerProducts	ROG_EF_Degreaser	3.542E-07	1E-10
tblConsumerProducts	ROG_EF_PesticidesFertilizers	5.152E-08	1E-10
tblEnergyUse	LightingElect	0.88	0.00
tblEnergyUse	LightingElect	1.20	0.00
tblEnergyUse	NT24E	0.82	0.00
tblEnergyUse	NT24NG	0.03	0.00
tblEnergyUse	T24E	0.39	0.00
tblEnergyUse	T24NG	2.02	0.00
tblLandscapeEquipment	NumberSummerDays	250	0.1

Building 4 Construction- Mitigated - San Bernardino-South Coast County, Annual

tblLandUse	LotAcreage	24.45	41.55
tblOffRoadEquipment	HorsePower	402.00	189.00
tblOffRoadEquipment	HorsePower	402.00	189.00
tblOffRoadEquipment	HorsePower	402.00	189.00
tblOffRoadEquipment	HorsePower	402.00	189.00
tblOffRoadEquipment	HorsePower	402.00	189.00
tblOffRoadEquipment	LoadFactor	0.38	0.50
tblOffRoadEquipment	LoadFactor	0.38	0.50
tblOffRoadEquipment	LoadFactor	0.38	0.50
tblOffRoadEquipment	LoadFactor	0.38	0.50
tblOffRoadEquipment	LoadFactor	0.38	0.50
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	5.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	8.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblProjectCharacteristics	CO2IntensityFactor	702.44	497.64

tblRoadDust	RoadPercentPave	100	0
tblSolidWaste	SolidWasteGenerationRate	1,000.99	0.00
tblVehicleTrips	ST_TR	1.68	0.00
tblVehicleTrips	SU_TR	1.68	0.00
tblVehicleTrips	WD_TR	1.68	0.00
tblWater	IndoorWaterUseRate	246,253,500.00	0.00

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					
2017	0.7412	7.8948	4.6954	9.1700e-003	1.0068	0.3305	1.3373	0.3888	0.3056	0.6944	0.0000	847.3769	847.3769	0.1921	0.0000	852.1804
2018	1.9126	8.0127	7.3233	0.0217	1.0671	0.2553	1.3224	0.2877	0.2422	0.5299	0.0000	1,986.7974	1,986.7974	0.1808	0.0000	1,991.3168
Maximum	**1.9126**	**8.0127**	**7.3233**	**0.0217**	**1.0671**	**0.3305**	**1.3373**	**0.3888**	**0.3056**	**0.6944**	**0.0000**	**1,986.7974**	**1,986.7974**	**0.1921**	**0.0000**	**1,991.3168**

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					
2017	0.4025	4.5994	4.2550	9.1700e-003	0.4948	0.1832	0.6780	0.1792	0.1766	0.3558	0.0000	847.3762	847.3762	0.1921	0.0000	852.1797
2018	1.9126	8.0127	7.3233	0.0217	1.0671	0.2553	1.3224	0.2877	0.2422	0.5299	0.0000	1,986.7970	1,986.7970	0.1808	0.0000	1,991.3163
Maximum	**1.9126**	**8.0127**	**7.3233**	**0.0217**	**1.0671**	**0.2553**	**1.3224**	**0.2877**	**0.2422**	**0.5299**	**0.0000**	**1,986.7970**	**1,986.7970**	**0.1921**	**0.0000**	**1,991.3163**

	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	N20	CO2e
Percent Reduction	**12.76**	**20.72**	**3.66**	**0.00**	**24.69**	**25.15**	**24.79**	**30.99**	**23.54**	**27.66**	**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	6-1-2017	8-31-2017	1.5022	0.8934
2	9-1-2017	11-30-2017	6.0189	2.9936
3	12-1-2017	2-28-2018	3.1244	3.1244
4	3-1-2018	5-31-2018	3.0732	3.0732
5	6-1-2018	8-31-2018	3.0723	3.0723
6	9-1-2018	9-30-2018	0.6672	0.6672
		Highest	6.0189	3.1244

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	2.0000e-005	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.0000e-005	3.0000e-005	0.0000	0.0000	4.0000e-005
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	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**3.0000e-005**	**3.0000e-005**	**0.0000**	**0.0000**	**4.0000e-005**

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	2.0000e-005	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.0000e-005	3.0000e-005	0.0000	0.0000	4.0000e-005
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	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**3.0000e-005**	**3.0000e-005**	**0.0000**	**0.0000**	**4.0000e-005**

	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	N20	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

Building 4 Construction- Mitigated - San Bernardino-South Coast County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	6/1/2017	7/12/2017	5	30	
2	Site Preparation	Site Preparation	7/13/2017	9/6/2017	5	40	
3	Grading	Grading	9/7/2017	11/22/2017	5	55	
4	Building Construction	Building Construction	11/23/2017	9/12/2018	5	210	
5	Architectural Coating	Architectural Coating	9/13/2018	11/21/2018	5	50	
6	Paving	Paving	11/22/2018	12/19/2018	5	20	

Acres of Grading (Site Preparation Phase): 20

Acres of Grading (Grading Phase): 467.5

Acres of Paving: 20.49

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 207,820; Non-Residential Outdoor: 202,500; Striped Parking Area: 54,648 (Architectural Coating – sqft)

OffRoad Equipment

Building 4 Construction- Mitigated - San Bernardino-South Coast County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	1	8.00	158	0.38
Demolition	Off-Highway Trucks	1	8.00	189	0.50
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Off-Highway Trucks	2	8.00	189	0.50
Site Preparation	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Excavators	0	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Off-Highway Trucks	2	8.00	189	0.50
Grading	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Scrapers	8	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	2	8.00	231	0.29
Building Construction	Forklifts	5	8.00	89	0.20
Building Construction	Generator Sets	2	8.00	84	0.74
Building Construction	Off-Highway Trucks	1	8.00	189	0.50
Building Construction	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Building Construction	Welders	2	8.00	46	0.45
Architectural Coating	Air Compressors	2	8.00	78	0.48
Paving	Off-Highway Trucks	1	8.00	189	0.50
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

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	4	10.00	0.00	80.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	15	38.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	12	830.00	324.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	2	166.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

3.2 Demolition - 2017

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					8.6500e-003	0.0000	8.6500e-003	1.3100e-003	0.0000	1.3100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0429	0.4324	0.2195	4.2000e-004		0.0220	0.0220		0.0206	0.0206	0.0000	38.3630	38.3630	9.9900e-003	0.0000	38.6128
Total	**0.0429**	**0.4324**	**0.2195**	**4.2000e-004**	**8.6500e-003**	**0.0220**	**0.0307**	**1.3100e-003**	**0.0206**	**0.0219**	**0.0000**	**38.3630**	**38.3630**	**9.9900e-003**	**0.0000**	**38.6128**

3.2 Demolition - 2017

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	3.3000e-004	0.0126	1.8900e-003	3.0000e-005	6.9000e-004	6.0000e-005	7.5000e-004	1.9000e-004	6.0000e-005	2.5000e-004	0.0000	3.0778	3.0778	1.8000e-004	0.0000	3.0824
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	9.9000e-004	8.6000e-004	8.3800e-003	2.0000e-005	1.6400e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.5496	1.5496	6.0000e-005	0.0000	1.5512
Total	**1.3200e-003**	**0.0134**	**0.0103**	**5.0000e-005**	**2.3300e-003**	**7.0000e-005**	**2.4100e-003**	**6.3000e-004**	**7.0000e-005**	**7.0000e-004**	**0.0000**	**4.6274**	**4.6274**	**2.4000e-004**	**0.0000**	**4.6335**

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					3.3700e-003	0.0000	3.3700e-003	5.1000e-004	0.0000	5.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0276	0.2925	0.2181	4.2000e-004		0.0145	0.0145		0.0139	0.0139	0.0000	38.3629	38.3629	9.9900e-003	0.0000	38.6127
Total	**0.0276**	**0.2925**	**0.2181**	**4.2000e-004**	**3.3700e-003**	**0.0145**	**0.0179**	**5.1000e-004**	**0.0139**	**0.0144**	**0.0000**	**38.3629**	**38.3629**	**9.9900e-003**	**0.0000**	**38.6127**

3.2 Demolition - 2017

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	3.3000e-004	0.0126	1.8900e-003	3.0000e-005	6.9000e-004	6.0000e-005	7.5000e-004	1.9000e-004	6.0000e-005	2.5000e-004	0.0000	3.0778	3.0778	1.8000e-004	0.0000	3.0824
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	9.9000e-004	8.6000e-004	8.3800e-003	2.0000e-005	1.6400e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.5496	1.5496	6.0000e-005	0.0000	1.5512
Total	**1.3200e-003**	**0.0134**	**0.0103**	**5.0000e-005**	**2.3300e-003**	**7.0000e-005**	**2.4100e-003**	**6.3000e-004**	**7.0000e-005**	**7.0000e-004**	**0.0000**	**4.6274**	**4.6274**	**2.4000e-004**	**0.0000**	**4.6335**

3.3 Site Preparation - 2017

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					0.2515	0.0000	0.2515	0.1336	0.0000	0.1336	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0941	1.0362	0.3890	8.6000e-004		0.0482	0.0482		0.0444	0.0444	0.0000	79.7740	79.7740	0.0244	0.0000	80.3850
Total	**0.0941**	**1.0362**	**0.3890**	**8.6000e-004**	**0.2515**	**0.0482**	**0.2997**	**0.1336**	**0.0444**	**0.1779**	**0.0000**	**79.7740**	**79.7740**	**0.0244**	**0.0000**	**80.3850**

3.3 Site Preparation - 2017

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	1.9900e-003	1.7200e-003	0.0168	3.0000e-005	3.2900e-003	2.0000e-005	3.3100e-003	8.7000e-004	2.0000e-005	9.0000e-004	0.0000	3.0992	3.0992	1.3000e-004	0.0000	3.1023
Total	**1.9900e-003**	**1.7200e-003**	**0.0168**	**3.0000e-005**	**3.2900e-003**	**2.0000e-005**	**3.3100e-003**	**8.7000e-004**	**2.0000e-005**	**9.0000e-004**	**0.0000**	**3.0992**	**3.0992**	**1.3000e-004**	**0.0000**	**3.1023**

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					0.0981	0.0000	0.0981	0.0521	0.0000	0.0521	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0458	0.5765	0.4163	8.6000e-004		0.0257	0.0257		0.0243	0.0243	0.0000	79.7739	79.7739	0.0244	0.0000	80.3849
Total	**0.0458**	**0.5765**	**0.4163**	**8.6000e-004**	**0.0981**	**0.0257**	**0.1238**	**0.0521**	**0.0243**	**0.0764**	**0.0000**	**79.7739**	**79.7739**	**0.0244**	**0.0000**	**80.3849**

3.3 Site Preparation - 2017

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	1.9900e-003	1.7200e-003	0.0168	3.0000e-005	3.2900e-003	2.0000e-005	3.3100e-003	8.7000e-004	2.0000e-005	9.0000e-004	0.0000	3.0992	3.0992	1.3000e-004	0.0000	3.1023
Total	**1.9900e-003**	**1.7200e-003**	**0.0168**	**3.0000e-005**	**3.2900e-003**	**2.0000e-005**	**3.3100e-003**	**8.7000e-004**	**2.0000e-005**	**9.0000e-004**	**0.0000**	**3.0992**	**3.0992**	**1.3000e-004**	**0.0000**	**3.1023**

3.4 Grading - 2017

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					0.5791	0.0000	0.5791	0.2088	0.0000	0.2088	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.4287	5.1581	2.8816	4.6000e-003		0.2190	0.2190		0.2015	0.2015	0.0000	426.7140	426.7140	0.1307	0.0000	429.9826
Total	**0.4287**	**5.1581**	**2.8816**	**4.6000e-003**	**0.5791**	**0.2190**	**0.7981**	**0.2088**	**0.2015**	**0.4103**	**0.0000**	**426.7140**	**426.7140**	**0.1307**	**0.0000**	**429.9826**

3.4 Grading - 2017

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	6.9300e-003	5.9800e-003	0.0584	1.2000e-004	0.0115	8.0000e-005	0.0115	3.0400e-003	8.0000e-005	3.1200e-003	0.0000	10.7956	10.7956	4.4000e-004	0.0000	10.8065
Total	**6.9300e-003**	**5.9800e-003**	**0.0584**	**1.2000e-004**	**0.0115**	**8.0000e-005**	**0.0115**	**3.0400e-003**	**8.0000e-005**	**3.1200e-003**	**0.0000**	**10.7956**	**10.7956**	**4.4000e-004**	**0.0000**	**10.8065**

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					0.2259	0.0000	0.2259	0.0814	0.0000	0.0814	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1537	2.4622	2.4154	4.6000e-003		0.1018	0.1018		0.0994	0.0994	0.0000	426.7135	426.7135	0.1307	0.0000	429.9821
Total	**0.1537**	**2.4622**	**2.4154**	**4.6000e-003**	**0.2259**	**0.1018**	**0.3276**	**0.0814**	**0.0994**	**0.1808**	**0.0000**	**426.7135**	**426.7135**	**0.1307**	**0.0000**	**429.9821**

3.4 Grading - 2017

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	6.9300e-003	5.9800e-003	0.0584	1.2000e-004	0.0115	8.0000e-005	0.0115	3.0400e-003	8.0000e-005	3.1200e-003	0.0000	10.7956	10.7956	4.4000e-004	0.0000	10.8065
Total	**6.9300e-003**	**5.9800e-003**	**0.0584**	**1.2000e-004**	**0.0115**	**8.0000e-005**	**0.0115**	**3.0400e-003**	**8.0000e-005**	**3.1200e-003**	**0.0000**	**10.7956**	**10.7956**	**4.4000e-004**	**0.0000**	**10.8065**

3.5 Building Construction - 2017

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	0.0704	0.6014	0.3534	6.1000e-004		0.0354	0.0354		0.0335	0.0335	0.0000	54.4622	54.4622	0.0128	0.0000	54.7819
Total	**0.0704**	**0.6014**	**0.3534**	**6.1000e-004**		**0.0354**	**0.0354**		**0.0335**	**0.0335**	**0.0000**	**54.4622**	**54.4622**	**0.0128**	**0.0000**	**54.7819**

3.5 Building Construction - 2017

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	0.0206	0.5815	0.1406	1.1900e-003	0.0276	4.7500e-003	0.0323	7.9600e-003	4.5500e-003	0.0125	0.0000	113.7864	113.7864	8.6900e-003	0.0000	114.0036
Worker	0.0743	0.0641	0.6260	1.2800e-003	0.1229	9.0000e-004	0.1238	0.0326	8.3000e-004	0.0335	0.0000	115.7552	115.7552	4.6800e-003	0.0000	115.8721
Total	**0.0948**	**0.6456**	**0.7665**	**2.4700e-003**	**0.1504**	**5.6500e-003**	**0.1561**	**0.0406**	**5.3800e-003**	**0.0460**	**0.0000**	**229.5416**	**229.5416**	**0.0134**	**0.0000**	**229.8757**

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	0.0704	0.6014	0.3534	6.1000e-004		0.0354	0.0354		0.0335	0.0335	0.0000	54.4621	54.4621	0.0128	0.0000	54.7819
Total	**0.0704**	**0.6014**	**0.3534**	**6.1000e-004**		**0.0354**	**0.0354**		**0.0335**	**0.0335**	**0.0000**	**54.4621**	**54.4621**	**0.0128**	**0.0000**	**54.7819**

3.5 Building Construction - 2017

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	0.0206	0.5815	0.1406	1.1900e-003	0.0276	4.7500e-003	0.0323	7.9600e-003	4.5500e-003	0.0125	0.0000	113.7864	113.7864	8.6900e-003	0.0000	114.0036
Worker	0.0743	0.0641	0.6260	1.2800e-003	0.1229	9.0000e-004	0.1238	0.0326	8.3000e-004	0.0335	0.0000	115.7552	115.7552	4.6800e-003	0.0000	115.8721
Total	**0.0948**	**0.6456**	**0.7665**	**2.4700e-003**	**0.1504**	**5.6500e-003**	**0.1561**	**0.0406**	**5.3800e-003**	**0.0460**	**0.0000**	**229.5416**	**229.5416**	**0.0134**	**0.0000**	**229.8757**

3.5 Building Construction - 2018

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	0.4112	3.5553	2.2769	4.1600e-003		0.2018	0.2018		0.1911	0.1911	0.0000	365.5561	365.5561	0.0850	0.0000	367.6798
Total	**0.4112**	**3.5553**	**2.2769**	**4.1600e-003**		**0.2018**	**0.2018**		**0.1911**	**0.1911**	**0.0000**	**365.5561**	**365.5561**	**0.0850**	**0.0000**	**367.6798**

3.5 Building Construction - 2018

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	0.1217	3.6915	0.8387	8.0600e-003	0.1869	0.0254	0.2123	0.0540	0.0243	0.0782	0.0000	769.8933	769.8933	0.0561	0.0000	771.2963
Worker	0.4485	0.3780	3.6994	8.4500e-003	0.8327	5.9000e-003	0.8386	0.2212	5.4300e-003	0.2266	0.0000	762.6587	762.6587	0.0277	0.0000	763.3520
Total	**0.5701**	**4.0694**	**4.5381**	**0.0165**	**1.0196**	**0.0313**	**1.0509**	**0.2751**	**0.0297**	**0.3048**	**0.0000**	**1,532.5520**	**1,532.5520**	**0.0839**	**0.0000**	**1,534.6483**

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	0.4112	3.5553	2.2769	4.1600e-003		0.2018	0.2018		0.1911	0.1911	0.0000	365.5557	365.5557	0.0850	0.0000	367.6794
Total	**0.4112**	**3.5553**	**2.2769**	**4.1600e-003**		**0.2018**	**0.2018**		**0.1911**	**0.1911**	**0.0000**	**365.5557**	**365.5557**	**0.0850**	**0.0000**	**367.6794**

3.5 Building Construction - 2018

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	0.1217	3.6915	0.8387	8.0600e-003	0.1869	0.0254	0.2123	0.0540	0.0243	0.0782	0.0000	769.8933	769.8933	0.0561	0.0000	771.2963
Worker	0.4485	0.3780	3.6994	8.4500e-003	0.8327	5.9000e-003	0.8386	0.2212	5.4300e-003	0.2266	0.0000	762.6587	762.6587	0.0277	0.0000	763.3520
Total	**0.5701**	**4.0694**	**4.5381**	**0.0165**	**1.0196**	**0.0313**	**1.0509**	**0.2751**	**0.0297**	**0.3048**	**0.0000**	**1,532.5520**	**1,532.5520**	**0.0839**	**0.0000**	**1,534.6483**

3.6 Architectural Coating - 2018

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	0.8368					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0199	0.1337	0.1236	2.0000e-004		0.0100	0.0100		0.0100	0.0100	0.0000	17.0217	17.0217	1.6200e-003	0.0000	17.0622
Total	**0.8567**	**0.1337**	**0.1236**	**2.0000e-004**		**0.0100**	**0.0100**		**0.0100**	**0.0100**	**0.0000**	**17.0217**	**17.0217**	**1.6200e-003**	**0.0000**	**17.0622**

3.6 Architectural Coating - 2018

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	0.0245	0.0207	0.2022	4.6000e-004	0.0455	3.2000e-004	0.0458	0.0121	3.0000e-004	0.0124	0.0000	41.6753	41.6753	1.5200e-003	0.0000	41.7132
Total	**0.0245**	**0.0207**	**0.2022**	**4.6000e-004**	**0.0455**	**3.2000e-004**	**0.0458**	**0.0121**	**3.0000e-004**	**0.0124**	**0.0000**	**41.6753**	**41.6753**	**1.5200e-003**	**0.0000**	**41.7132**

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	0.8368					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0199	0.1337	0.1236	2.0000e-004		0.0100	0.0100		0.0100	0.0100	0.0000	17.0217	17.0217	1.6200e-003	0.0000	17.0621
Total	**0.8567**	**0.1337**	**0.1236**	**2.0000e-004**		**0.0100**	**0.0100**		**0.0100**	**0.0100**	**0.0000**	**17.0217**	**17.0217**	**1.6200e-003**	**0.0000**	**17.0621**

3.6 Architectural Coating - 2018

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	0.0245	0.0207	0.2022	4.6000e-004	0.0455	3.2000e-004	0.0458	0.0121	3.0000e-004	0.0124	0.0000	41.6753	41.6753	1.5200e-003	0.0000	41.7132
Total	**0.0245**	**0.0207**	**0.2022**	**4.6000e-004**	**0.0455**	**3.2000e-004**	**0.0458**	**0.0121**	**3.0000e-004**	**0.0124**	**0.0000**	**41.6753**	**41.6753**	**1.5200e-003**	**0.0000**	**41.7132**

3.7 Paving - 2018

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	0.0221	0.2327	0.1737	3.1000e-004		0.0119	0.0119		0.0110	0.0110	0.0000	28.1847	28.1847	8.7700e-003	0.0000	28.4040
Paving	0.0268					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0490**	**0.2327**	**0.1737**	**3.1000e-004**		**0.0119**	**0.0119**		**0.0110**	**0.0110**	**0.0000**	**28.1847**	**28.1847**	**8.7700e-003**	**0.0000**	**28.4040**

3.7 Paving - 2018

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	1.0600e-003	9.0000e-004	8.7700e-003	2.0000e-005	1.9700e-003	1.0000e-005	1.9900e-003	5.2000e-004	1.0000e-005	5.4000e-004	0.0000	1.8076	1.8076	7.0000e-005	0.0000	1.8093
Total	**1.0600e-003**	**9.0000e-004**	**8.7700e-003**	**2.0000e-005**	**1.9700e-003**	**1.0000e-005**	**1.9900e-003**	**5.2000e-004**	**1.0000e-005**	**5.4000e-004**	**0.0000**	**1.8076**	**1.8076**	**7.0000e-005**	**0.0000**	**1.8093**

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	0.0221	0.2327	0.1737	3.1000e-004		0.0119	0.0119		0.0110	0.0110	0.0000	28.1846	28.1846	8.7700e-003	0.0000	28.4040
Paving	0.0268					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0490**	**0.2327**	**0.1737**	**3.1000e-004**		**0.0119**	**0.0119**		**0.0110**	**0.0110**	**0.0000**	**28.1846**	**28.1846**	**8.7700e-003**	**0.0000**	**28.4040**

3.7 Paving - 2018

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	1.0600e-003	9.0000e-004	8.7700e-003	2.0000e-005	1.9700e-003	1.0000e-005	1.9900e-003	5.2000e-004	1.0000e-005	5.4000e-004	0.0000	1.8076	1.8076	7.0000e-005	0.0000	1.8093
Total	**1.0600e-003**	**9.0000e-004**	**8.7700e-003**	**2.0000e-005**	**1.9700e-003**	**1.0000e-005**	**1.9900e-003**	**5.2000e-004**	**1.0000e-005**	**5.4000e-004**	**0.0000**	**1.8076**	**1.8076**	**7.0000e-005**	**0.0000**	**1.8093**

4.0 Operational Detail - Mobile

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	0.0000	0.0000	0.0000	0.0000	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

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
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

	Miles			Trip %			Trip Purpose %		
Land Use	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
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

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Unrefrigerated Warehouse-No Rail	0.536558	0.040171	0.178324	0.131133	0.021173	0.005906	0.016602	0.058581	0.001315	0.001778	0.006379	0.000829	0.001251
Parking Lot	0.536558	0.040171	0.178324	0.131133	0.021173	0.005906	0.016602	0.058581	0.001315	0.001778	0.006379	0.000829	0.001251

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	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas 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
NaturalGas 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

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					
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	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		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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					
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	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		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
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**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
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

	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	2.0000e-005	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.0000e-005	3.0000e-005	0.0000	0.0000	4.0000e-005
Unmitigated	2.0000e-005	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.0000e-005	3.0000e-005	0.0000	0.0000	4.0000e-005

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	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.0000e-005					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.0000e-005	3.0000e-005	0.0000	0.0000	4.0000e-005
Total	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**3.0000e-005**	**3.0000e-005**	**0.0000**	**0.0000**	**4.0000e-005**

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	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.0000e-005					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.0000e-005	3.0000e-005	0.0000	0.0000	4.0000e-005
Total	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**3.0000e-005**	**3.0000e-005**	**0.0000**	**0.0000**	**4.0000e-005**

7.0 Water Detail

7.1 Mitigation Measures Water

	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/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
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**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
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

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			
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**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
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

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

Building 4 Construction- Unmitigated

San Bernardino-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	1,064.88	1000sqft	41.55	1,064,880.00	0
Parking Lot	2,277.00	Space	20.49	910,800.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	32
Climate Zone	10			**Operational Year**	2018
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	497.64	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Building 4 Construction- Unmitigated - San Bernardino-South Coast County, Annual

Project Characteristics - CPUC GHG Calculator version 3c, worksheet tab "CO2 Allocations," cells AH/AQ 35-44.

Land Use - Total lot acreage: 62.04; A trailer parking space required significantly more space than one regular parking space. Therefore, for analysis purposes, 1 trailer parking=3.27 parking spaces

Construction Phase - Based on 2018 opening year and past project experience

Off-road Equipment - Based on information provided by the project engineer

Off-road Equipment - Based on information provided by the Project engineer; off-highway truck= water truck

Off-road Equipment - Off-highway trucks= water truckd

Off-road Equipment - Based on information provided by the Project engineer; off-highway truck= water truck

Off-road Equipment - Off-highway trucks= water trucks

Off-road Equipment - Based on information provided by the Project engineer; off-highway truck= water truck

Trips and VMT -

Demolition -

Grading -

Architectural Coating - Based on Rule 1113 and information provided by the Project engineer

Vehicle Trips - Construction only

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Road Dust - Construction only

Consumer Products - Construction only

Area Coating - Construction only

Landscape Equipment - Construction only

Energy Use - Construction only

Water And Wastewater - Construction only

Solid Waste - Construction only

Construction Off-road Equipment Mitigation -

Building 4 Construction- Unmitigated - San Bernardino-South Coast County, Annual

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	532,440.00	202,500.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	1,597,320.00	207,820.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblAreaCoating	ReapplicationRatePercent	10	0
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstructionPhase	NumDays	75.00	50.00
tblConstructionPhase	NumDays	1,110.00	210.00
tblConstructionPhase	NumDays	70.00	30.00
tblConstructionPhase	NumDays	110.00	55.00
tblConstructionPhase	NumDays	75.00	20.00
tblConsumerProducts	ROG_EF	1.98E-05	0
tblConsumerProducts	ROG_EF_Degreaser	3.542E-07	1E-10
tblConsumerProducts	ROG_EF_PesticidesFertilizers	5.152E-08	1E-10
tblEnergyUse	LightingElect	0.88	0.00
tblEnergyUse	LightingElect	1.20	0.00
tblEnergyUse	NT24E	0.82	0.00
tblEnergyUse	NT24NG	0.03	0.00
tblEnergyUse	T24E	0.39	0.00
tblEnergyUse	T24NG	2.02	0.00
tblLandscapeEquipment	NumberSummerDays	250	0.1
tblLandUse	LotAcreage	24.45	41.55
tblOffRoadEquipment	HorsePower	402.00	189.00
tblOffRoadEquipment	HorsePower	402.00	189.00
tblOffRoadEquipment	HorsePower	402.00	189.00
tblOffRoadEquipment	HorsePower	402.00	189.00
tblOffRoadEquipment	HorsePower	402.00	189.00

tblOffRoadEquipment	LoadFactor	0.38	0.50
tblOffRoadEquipment	LoadFactor	0.38	0.50
tblOffRoadEquipment	LoadFactor	0.38	0.50
tblOffRoadEquipment	LoadFactor	0.38	0.50
tblOffRoadEquipment	LoadFactor	0.38	0.50
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	5.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	8.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblProjectCharacteristics	CO2IntensityFactor	702.44	497.64
tblRoadDust	RoadPercentPave	100	0
tblSolidWaste	SolidWasteGenerationRate	1,000.99	0.00
tblVehicleTrips	ST_TR	1.68	0.00
tblVehicleTrips	SU_TR	1.68	0.00
tblVehicleTrips	WD_TR	1.68	0.00
tblWater	IndoorWaterUseRate	246,253,500.00	0.00

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					
2017	0.7412	7.8948	4.6954	9.1700e-003	1.0068	0.3305	1.3373	0.3888	0.3056	0.6944	0.0000	847.3769	847.3769	0.1921	0.0000	852.1804
2018	1.9126	8.0127	7.3233	0.0217	1.0671	0.2553	1.3224	0.2877	0.2422	0.5299	0.0000	1,986.7974	1,986.7974	0.1808	0.0000	1,991.3168
Maximum	**1.9126**	**8.0127**	**7.3233**	**0.0217**	**1.0671**	**0.3305**	**1.3373**	**0.3888**	**0.3056**	**0.6944**	**0.0000**	**1,986.7974**	**1,986.7974**	**0.1921**	**0.0000**	**1,991.3168**

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					
2017	0.7412	7.8948	4.6954	9.1700e-003	0.4948	0.3305	0.8254	0.1792	0.3056	0.4848	0.0000	847.3762	847.3762	0.1921	0.0000	852.1797
2018	1.9126	8.0127	7.3233	0.0217	1.0671	0.2553	1.3224	0.2877	0.2422	0.5299	0.0000	1,986.7970	1,986.7970	0.1808	0.0000	1,991.3163
Maximum	**1.9126**	**8.0127**	**7.3233**	**0.0217**	**1.0671**	**0.3305**	**1.3224**	**0.2877**	**0.3056**	**0.5299**	**0.0000**	**1,986.7970**	**1,986.7970**	**0.1921**	**0.0000**	**1,991.3163**

	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	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**24.69**	**0.00**	**19.25**	**30.99**	**0.00**	**17.12**	**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	**6-1-2017**	**8-31-2017**	1.5022	1.5022
2	**9-1-2017**	**11-30-2017**	6.0189	6.0189
3	**12-1-2017**	**2-28-2018**	3.1244	3.1244
4	**3-1-2018**	**5-31-2018**	3.0732	3.0732
5	**6-1-2018**	**8-31-2018**	3.0723	3.0723
6	**9-1-2018**	**9-30-2018**	0.6672	0.6672
		Highest	6.0189	6.0189

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	2.0000e-005	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.0000e-005	3.0000e-005	0.0000	0.0000	4.0000e-005
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	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**3.0000e-005**	**3.0000e-005**	**0.0000**	**0.0000**	**4.0000e-005**

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	2.0000e-005	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.0000e-005	3.0000e-005	0.0000	0.0000	4.0000e-005
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	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**3.0000e-005**	**3.0000e-005**	**0.0000**	**0.0000**	**4.0000e-005**

	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	N20	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

Building 4 Construction- Unmitigated - San Bernardino-South Coast County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	6/1/2017	7/12/2017	5	30	
2	Site Preparation	Site Preparation	7/13/2017	9/6/2017	5	40	
3	Grading	Grading	9/7/2017	11/22/2017	5	55	
4	Building Construction	Building Construction	11/23/2017	9/12/2018	5	210	
5	Architectural Coating	Architectural Coating	9/13/2018	11/21/2018	5	50	
6	Paving	Paving	11/22/2018	12/19/2018	5	20	

Acres of Grading (Site Preparation Phase): 20

Acres of Grading (Grading Phase): 467.5

Acres of Paving: 20.49

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 207,820; Non-Residential Outdoor: 202,500; Striped Parking Area: 54,648 (Architectural Coating – sqft)

OffRoad Equipment

Building 4 Construction- Unmitigated - San Bernardino-South Coast County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	1	8.00	158	0.38
Demolition	Off-Highway Trucks	1	8.00	189	0.50
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Off-Highway Trucks	2	8.00	189	0.50
Site Preparation	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Excavators	0	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Off-Highway Trucks	2	8.00	189	0.50
Grading	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Scrapers	8	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	2	8.00	231	0.29
Building Construction	Forklifts	5	8.00	89	0.20
Building Construction	Generator Sets	2	8.00	84	0.74
Building Construction	Off-Highway Trucks	1	8.00	189	0.50
Building Construction	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Building Construction	Welders	2	8.00	46	0.45
Architectural Coating	Air Compressors	2	8.00	78	0.48
Paving	Off-Highway Trucks	1	8.00	189	0.50
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

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	4	10.00	0.00	80.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	15	38.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	12	830.00	324.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	2	166.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	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 Demolition - 2017

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					8.6500e-003	0.0000	8.6500e-003	1.3100e-003	0.0000	1.3100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0429	0.4324	0.2195	4.2000e-004		0.0220	0.0220		0.0206	0.0206	0.0000	38.3630	38.3630	9.9900e-003	0.0000	38.6128
Total	**0.0429**	**0.4324**	**0.2195**	**4.2000e-004**	**8.6500e-003**	**0.0220**	**0.0307**	**1.3100e-003**	**0.0206**	**0.0219**	**0.0000**	**38.3630**	**38.3630**	**9.9900e-003**	**0.0000**	**38.6128**

3.2 Demolition - 2017

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	3.3000e-004	0.0126	1.8900e-003	3.0000e-005	6.9000e-004	6.0000e-005	7.5000e-004	1.9000e-004	6.0000e-005	2.5000e-004	0.0000	3.0778	3.0778	1.8000e-004	0.0000	3.0824
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	9.9000e-004	8.6000e-004	8.3800e-003	2.0000e-005	1.6400e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.5496	1.5496	6.0000e-005	0.0000	1.5512
Total	**1.3200e-003**	**0.0134**	**0.0103**	**5.0000e-005**	**2.3300e-003**	**7.0000e-005**	**2.4100e-003**	**6.3000e-004**	**7.0000e-005**	**7.0000e-004**	**0.0000**	**4.6274**	**4.6274**	**2.4000e-004**	**0.0000**	**4.6335**

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					3.3700e-003	0.0000	3.3700e-003	5.1000e-004	0.0000	5.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0429	0.4324	0.2195	4.2000e-004		0.0220	0.0220		0.0206	0.0206	0.0000	38.3629	38.3629	9.9900e-003	0.0000	38.6127
Total	**0.0429**	**0.4324**	**0.2195**	**4.2000e-004**	**3.3700e-003**	**0.0220**	**0.0254**	**5.1000e-004**	**0.0206**	**0.0211**	**0.0000**	**38.3629**	**38.3629**	**9.9900e-003**	**0.0000**	**38.6127**

3.2 Demolition - 2017

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	3.3000e-004	0.0126	1.8900e-003	3.0000e-005	6.9000e-004	6.0000e-005	7.5000e-004	1.9000e-004	6.0000e-005	2.5000e-004	0.0000	3.0778	3.0778	1.8000e-004	0.0000	3.0824
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	9.9000e-004	8.6000e-004	8.3800e-003	2.0000e-005	1.6400e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.5496	1.5496	6.0000e-005	0.0000	1.5512
Total	**1.3200e-003**	**0.0134**	**0.0103**	**5.0000e-005**	**2.3300e-003**	**7.0000e-005**	**2.4100e-003**	**6.3000e-004**	**7.0000e-005**	**7.0000e-004**	**0.0000**	**4.6274**	**4.6274**	**2.4000e-004**	**0.0000**	**4.6335**

3.3 Site Preparation - 2017

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					0.2515	0.0000	0.2515	0.1336	0.0000	0.1336	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0941	1.0362	0.3890	8.6000e-004		0.0482	0.0482		0.0444	0.0444	0.0000	79.7740	79.7740	0.0244	0.0000	80.3850
Total	**0.0941**	**1.0362**	**0.3890**	**8.6000e-004**	**0.2515**	**0.0482**	**0.2997**	**0.1336**	**0.0444**	**0.1779**	**0.0000**	**79.7740**	**79.7740**	**0.0244**	**0.0000**	**80.3850**

3.3 Site Preparation - 2017

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	1.9900e-003	1.7200e-003	0.0168	3.0000e-005	3.2900e-003	2.0000e-005	3.3100e-003	8.7000e-004	2.0000e-005	9.0000e-004	0.0000	3.0992	3.0992	1.3000e-004	0.0000	3.1023
Total	**1.9900e-003**	**1.7200e-003**	**0.0168**	**3.0000e-005**	**3.2900e-003**	**2.0000e-005**	**3.3100e-003**	**8.7000e-004**	**2.0000e-005**	**9.0000e-004**	**0.0000**	**3.0992**	**3.0992**	**1.3000e-004**	**0.0000**	**3.1023**

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					0.0981	0.0000	0.0981	0.0521	0.0000	0.0521	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0941	1.0362	0.3890	8.6000e-004		0.0482	0.0482		0.0444	0.0444	0.0000	79.7739	79.7739	0.0244	0.0000	80.3849
Total	**0.0941**	**1.0362**	**0.3890**	**8.6000e-004**	**0.0981**	**0.0482**	**0.1463**	**0.0521**	**0.0444**	**0.0964**	**0.0000**	**79.7739**	**79.7739**	**0.0244**	**0.0000**	**80.3849**

3.3 Site Preparation - 2017

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	1.9900e-003	1.7200e-003	0.0168	3.0000e-005	3.2900e-003	2.0000e-005	3.3100e-003	8.7000e-004	2.0000e-005	9.0000e-004	0.0000	3.0992	3.0992	1.3000e-004	0.0000	3.1023
Total	**1.9900e-003**	**1.7200e-003**	**0.0168**	**3.0000e-005**	**3.2900e-003**	**2.0000e-005**	**3.3100e-003**	**8.7000e-004**	**2.0000e-005**	**9.0000e-004**	**0.0000**	**3.0992**	**3.0992**	**1.3000e-004**	**0.0000**	**3.1023**

3.4 Grading - 2017

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					0.5791	0.0000	0.5791	0.2088	0.0000	0.2088	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.4287	5.1581	2.8816	4.6000e-003		0.2190	0.2190		0.2015	0.2015	0.0000	426.7140	426.7140	0.1307	0.0000	429.9826
Total	**0.4287**	**5.1581**	**2.8816**	**4.6000e-003**	**0.5791**	**0.2190**	**0.7981**	**0.2088**	**0.2015**	**0.4103**	**0.0000**	**426.7140**	**426.7140**	**0.1307**	**0.0000**	**429.9826**

3.4 Grading - 2017

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	6.9300e-003	5.9800e-003	0.0584	1.2000e-004	0.0115	8.0000e-005	0.0115	3.0400e-003	8.0000e-005	3.1200e-003	0.0000	10.7956	10.7956	4.4000e-004	0.0000	10.8065
Total	**6.9300e-003**	**5.9800e-003**	**0.0584**	**1.2000e-004**	**0.0115**	**8.0000e-005**	**0.0115**	**3.0400e-003**	**8.0000e-005**	**3.1200e-003**	**0.0000**	**10.7956**	**10.7956**	**4.4000e-004**	**0.0000**	**10.8065**

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					0.2259	0.0000	0.2259	0.0814	0.0000	0.0814	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.4287	5.1581	2.8816	4.6000e-003		0.2190	0.2190		0.2015	0.2015	0.0000	426.7135	426.7135	0.1307	0.0000	429.9821
Total	**0.4287**	**5.1581**	**2.8816**	**4.6000e-003**	**0.2259**	**0.2190**	**0.4449**	**0.0814**	**0.2015**	**0.2830**	**0.0000**	**426.7135**	**426.7135**	**0.1307**	**0.0000**	**429.9821**

3.4 Grading - 2017

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	6.9300e-003	5.9800e-003	0.0584	1.2000e-004	0.0115	8.0000e-005	0.0115	3.0400e-003	8.0000e-005	3.1200e-003	0.0000	10.7956	10.7956	4.4000e-004	0.0000	10.8065
Total	**6.9300e-003**	**5.9800e-003**	**0.0584**	**1.2000e-004**	**0.0115**	**8.0000e-005**	**0.0115**	**3.0400e-003**	**8.0000e-005**	**3.1200e-003**	**0.0000**	**10.7956**	**10.7956**	**4.4000e-004**	**0.0000**	**10.8065**

3.5 Building Construction - 2017

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	0.0704	0.6014	0.3534	6.1000e-004		0.0354	0.0354		0.0335	0.0335	0.0000	54.4622	54.4622	0.0128	0.0000	54.7819
Total	**0.0704**	**0.6014**	**0.3534**	**6.1000e-004**		**0.0354**	**0.0354**		**0.0335**	**0.0335**	**0.0000**	**54.4622**	**54.4622**	**0.0128**	**0.0000**	**54.7819**

3.5 Building Construction - 2017

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	0.0206	0.5815	0.1406	1.1900e-003	0.0276	4.7500e-003	0.0323	7.9600e-003	4.5500e-003	0.0125	0.0000	113.7864	113.7864	8.6900e-003	0.0000	114.0036
Worker	0.0743	0.0641	0.6260	1.2800e-003	0.1229	9.0000e-004	0.1238	0.0326	8.3000e-004	0.0335	0.0000	115.7552	115.7552	4.6800e-003	0.0000	115.8721
Total	**0.0948**	**0.6456**	**0.7665**	**2.4700e-003**	**0.1504**	**5.6500e-003**	**0.1561**	**0.0406**	**5.3800e-003**	**0.0460**	**0.0000**	**229.5416**	**229.5416**	**0.0134**	**0.0000**	**229.8757**

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	0.0704	0.6014	0.3534	6.1000e-004		0.0354	0.0354		0.0335	0.0335	0.0000	54.4621	54.4621	0.0128	0.0000	54.7819
Total	**0.0704**	**0.6014**	**0.3534**	**6.1000e-004**		**0.0354**	**0.0354**		**0.0335**	**0.0335**	**0.0000**	**54.4621**	**54.4621**	**0.0128**	**0.0000**	**54.7819**

3.5 Building Construction - 2017

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	0.0206	0.5815	0.1406	1.1900e-003	0.0276	4.7500e-003	0.0323	7.9600e-003	4.5500e-003	0.0125	0.0000	113.7864	113.7864	8.6900e-003	0.0000	114.0036
Worker	0.0743	0.0641	0.6260	1.2800e-003	0.1229	9.0000e-004	0.1238	0.0326	8.3000e-004	0.0335	0.0000	115.7552	115.7552	4.6800e-003	0.0000	115.8721
Total	**0.0948**	**0.6456**	**0.7665**	**2.4700e-003**	**0.1504**	**5.6500e-003**	**0.1561**	**0.0406**	**5.3800e-003**	**0.0460**	**0.0000**	**229.5416**	**229.5416**	**0.0134**	**0.0000**	**229.8757**

3.5 Building Construction - 2018

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	0.4112	3.5553	2.2769	4.1600e-003		0.2018	0.2018		0.1911	0.1911	0.0000	365.5561	365.5561	0.0850	0.0000	367.6798
Total	**0.4112**	**3.5553**	**2.2769**	**4.1600e-003**		**0.2018**	**0.2018**		**0.1911**	**0.1911**	**0.0000**	**365.5561**	**365.5561**	**0.0850**	**0.0000**	**367.6798**

3.5 Building Construction - 2018

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	0.1217	3.6915	0.8387	8.0600e-003	0.1869	0.0254	0.2123	0.0540	0.0243	0.0782	0.0000	769.8933	769.8933	0.0561	0.0000	771.2963
Worker	0.4485	0.3780	3.6994	8.4500e-003	0.8327	5.9000e-003	0.8386	0.2212	5.4300e-003	0.2266	0.0000	762.6587	762.6587	0.0277	0.0000	763.3520
Total	**0.5701**	**4.0694**	**4.5381**	**0.0165**	**1.0196**	**0.0313**	**1.0509**	**0.2751**	**0.0297**	**0.3048**	**0.0000**	**1,532.5520**	**1,532.5520**	**0.0839**	**0.0000**	**1,534.6483**

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	0.4112	3.5553	2.2769	4.1600e-003		0.2018	0.2018		0.1911	0.1911	0.0000	365.5557	365.5557	0.0850	0.0000	367.6794
Total	**0.4112**	**3.5553**	**2.2769**	**4.1600e-003**		**0.2018**	**0.2018**		**0.1911**	**0.1911**	**0.0000**	**365.5557**	**365.5557**	**0.0850**	**0.0000**	**367.6794**

3.5 Building Construction - 2018

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	0.1217	3.6915	0.8387	8.0600e-003	0.1869	0.0254	0.2123	0.0540	0.0243	0.0782	0.0000	769.8933	769.8933	0.0561	0.0000	771.2963
Worker	0.4485	0.3780	3.6994	8.4500e-003	0.8327	5.9000e-003	0.8386	0.2212	5.4300e-003	0.2266	0.0000	762.6587	762.6587	0.0277	0.0000	763.3520
Total	**0.5701**	**4.0694**	**4.5381**	**0.0165**	**1.0196**	**0.0313**	**1.0509**	**0.2751**	**0.0297**	**0.3048**	**0.0000**	**1,532.5520**	**1,532.5520**	**0.0839**	**0.0000**	**1,534.6483**

3.6 Architectural Coating - 2018

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	0.8368					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0199	0.1337	0.1236	2.0000e-004		0.0100	0.0100		0.0100	0.0100	0.0000	17.0217	17.0217	1.6200e-003	0.0000	17.0622
Total	**0.8567**	**0.1337**	**0.1236**	**2.0000e-004**		**0.0100**	**0.0100**		**0.0100**	**0.0100**	**0.0000**	**17.0217**	**17.0217**	**1.6200e-003**	**0.0000**	**17.0622**

3.6 Architectural Coating - 2018

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	0.0245	0.0207	0.2022	4.6000e-004	0.0455	3.2000e-004	0.0458	0.0121	3.0000e-004	0.0124	0.0000	41.6753	41.6753	1.5200e-003	0.0000	41.7132
Total	**0.0245**	**0.0207**	**0.2022**	**4.6000e-004**	**0.0455**	**3.2000e-004**	**0.0458**	**0.0121**	**3.0000e-004**	**0.0124**	**0.0000**	**41.6753**	**41.6753**	**1.5200e-003**	**0.0000**	**41.7132**

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	0.8368					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0199	0.1337	0.1236	2.0000e-004		0.0100	0.0100		0.0100	0.0100	0.0000	17.0217	17.0217	1.6200e-003	0.0000	17.0621
Total	**0.8567**	**0.1337**	**0.1236**	**2.0000e-004**		**0.0100**	**0.0100**		**0.0100**	**0.0100**	**0.0000**	**17.0217**	**17.0217**	**1.6200e-003**	**0.0000**	**17.0621**

3.6 Architectural Coating - 2018

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	0.0245	0.0207	0.2022	4.6000e-004	0.0455	3.2000e-004	0.0458	0.0121	3.0000e-004	0.0124	0.0000	41.6753	41.6753	1.5200e-003	0.0000	41.7132
Total	**0.0245**	**0.0207**	**0.2022**	**4.6000e-004**	**0.0455**	**3.2000e-004**	**0.0458**	**0.0121**	**3.0000e-004**	**0.0124**	**0.0000**	**41.6753**	**41.6753**	**1.5200e-003**	**0.0000**	**41.7132**

3.7 Paving - 2018

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	0.0221	0.2327	0.1737	3.1000e-004		0.0119	0.0119		0.0110	0.0110	0.0000	28.1847	28.1847	8.7700e-003	0.0000	28.4040
Paving	0.0268					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0490**	**0.2327**	**0.1737**	**3.1000e-004**		**0.0119**	**0.0119**		**0.0110**	**0.0110**	**0.0000**	**28.1847**	**28.1847**	**8.7700e-003**	**0.0000**	**28.4040**

3.7 Paving - 2018

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	1.0600e-003	9.0000e-004	8.7700e-003	2.0000e-005	1.9700e-003	1.0000e-005	1.9900e-003	5.2000e-004	1.0000e-005	5.4000e-004	0.0000	1.8076	1.8076	7.0000e-005	0.0000	1.8093
Total	**1.0600e-003**	**9.0000e-004**	**8.7700e-003**	**2.0000e-005**	**1.9700e-003**	**1.0000e-005**	**1.9900e-003**	**5.2000e-004**	**1.0000e-005**	**5.4000e-004**	**0.0000**	**1.8076**	**1.8076**	**7.0000e-005**	**0.0000**	**1.8093**

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	0.0221	0.2327	0.1737	3.1000e-004		0.0119	0.0119		0.0110	0.0110	0.0000	28.1846	28.1846	8.7700e-003	0.0000	28.4040
Paving	0.0268					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0490**	**0.2327**	**0.1737**	**3.1000e-004**		**0.0119**	**0.0119**		**0.0110**	**0.0110**	**0.0000**	**28.1846**	**28.1846**	**8.7700e-003**	**0.0000**	**28.4040**

3.7 Paving - 2018

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	1.0600e-003	9.0000e-004	8.7700e-003	2.0000e-005	1.9700e-003	1.0000e-005	1.9900e-003	5.2000e-004	1.0000e-005	5.4000e-004	0.0000	1.8076	1.8076	7.0000e-005	0.0000	1.8093
Total	**1.0600e-003**	**9.0000e-004**	**8.7700e-003**	**2.0000e-005**	**1.9700e-003**	**1.0000e-005**	**1.9900e-003**	**5.2000e-004**	**1.0000e-005**	**5.4000e-004**	**0.0000**	**1.8076**	**1.8076**	**7.0000e-005**	**0.0000**	**1.8093**

4.0 Operational Detail - Mobile

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	0.0000	0.0000	0.0000	0.0000	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

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
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

	Miles			Trip %			Trip Purpose %		
Land Use	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
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

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Unrefrigerated Warehouse-No Rail	0.536558	0.040171	0.178324	0.131133	0.021173	0.005906	0.016602	0.058581	0.001315	0.001778	0.006379	0.000829	0.001251
Parking Lot	0.536558	0.040171	0.178324	0.131133	0.021173	0.005906	0.016602	0.058581	0.001315	0.001778	0.006379	0.000829	0.001251

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	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas 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
NaturalGas 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

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					
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	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		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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					
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	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		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
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**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
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

	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	2.0000e-005	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.0000e-005	3.0000e-005	0.0000	0.0000	4.0000e-005
Unmitigated	2.0000e-005	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.0000e-005	3.0000e-005	0.0000	0.0000	4.0000e-005

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	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.0000e-005					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.0000e-005	3.0000e-005	0.0000	0.0000	4.0000e-005
Total	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**3.0000e-005**	**3.0000e-005**	**0.0000**	**0.0000**	**4.0000e-005**

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	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.0000e-005					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.0000e-005	3.0000e-005	0.0000	0.0000	4.0000e-005
Total	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**3.0000e-005**	**3.0000e-005**	**0.0000**	**0.0000**	**4.0000e-005**

7.0 Water Detail

7.1 Mitigation Measures Water

	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/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
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**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
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

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			
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**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
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

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

Building 4 Operations Passenger Cars

San Bernardino-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	1,064.88	1000sqft	41.55	1,064,880.00	0
Parking Lot	2,277.00	Space	20.49	910,800.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	32
Climate Zone	10			**Operational Year**	2018
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	497.64	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Building 4 Operations Passenger Cars - San Bernardino-South Coast County, Annual

Project Characteristics - CPUC GHG Calculator version 3c, worksheet tab "CO2 Allocations," cells AH/AQ 35-44.

Land Use - Total lot acreage: 62.04; A trailer parking space requires significantly more space than one regular parking space. Therefore, for analysis purposes, 1 trailer parking=3.27 spaces

Construction Phase - Operation only

Off-road Equipment -

Off-road Equipment - Operation only

On-road Fugitive Dust - Operation only

Vehicle Trips - Based on traffic study and ITE Trip Generation Manual, 9th Edition

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Area Coating - Based on information provided by the Project engineer

Energy Use - Title-24 Electricity Energy Intensity and Title-24 Natural Gas Energy Intensity were adjusted by 5% (nonresidential) to reflect 2016 Title 24 requirements. Source: 2016 Building Energy Efficiency Standards Adoption Hearing (CEC 2015)

Fleet Mix - Passenger Cars only

Operational Off-Road Equipment - All yard trucks are non-diesel

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Exterior	532440	202500
tblAreaCoating	Area_Nonresidential_Interior	1597320	207820
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	0.5
tblConstructionPhase	NumDays	40.00	1.00
tblEnergyUse	T24E	0.39	0.37
tblEnergyUse	T24NG	2.02	1.92
tblFleetMix	FleetMixLandUseSubType	Unrefrigerated Warehouse-No Rail	Parking Lot
tblFleetMix	FleetMixLandUseSubType	Parking Lot	Unrefrigerated Warehouse-No Rail
tblFleetMix	HHD	0.06	0.00
tblFleetMix	LDA	0.54	1.00

Building 4 Operations Passenger Cars - San Bernardino-South Coast County, Annual

tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT2	0.18	0.00
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	5.9060e-003	0.00
tblFleetMix	MCY	6.3790e-003	0.00
tblFleetMix	MDV	0.13	0.00
tblFleetMix	MH	1.2510e-003	0.00
tblFleetMix	MHD	0.02	0.00
tblFleetMix	OBUS	1.3150e-003	0.00
tblFleetMix	SBUS	8.2900e-004	0.00
tblFleetMix	UBUS	1.7780e-003	0.00
tblLandUse	LotAcreage	24.45	41.55
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOnRoadDust	HaulingPercentPave	100.00	0.00
tblOnRoadDust	VendorPercentPave	100.00	0.00
tblOnRoadDust	WorkerPercentPave	100.00	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	OperLoadFactor	0.37	0.37
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	4.00
tblProjectCharacteristics	CO2IntensityFactor	702.44	497.64
tblVehicleTrips	CNW_TTP	41.00	0.00
tblVehicleTrips	CW_TTP	59.00	100.00
tblVehicleTrips	DV_TP	5.00	0.00

tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	1.68	1.04
tblVehicleTrips	SU_TR	1.68	1.04
tblVehicleTrips	WD_TR	1.68	1.04

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					
2017	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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					
2017	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

	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	N20	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	4.0187	4.0000e-004	0.0432	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004	0.0000	0.0829	0.0829	2.3000e-004	0.0000	0.0886
Energy	0.0112	0.1018	0.0855	6.1000e-004		7.7400e-003	7.7400e-003		7.7400e-003	7.7400e-003	0.0000	866.2171	866.2171	0.0462	0.0111	870.6902
Mobile	0.3288	0.6325	6.8054	0.0220	2.4935	0.0140	2.5075	0.6619	0.0129	0.6749	0.0000	1,989.8395	1,989.8395	0.0485	0.0000	1,991.0521
Offroad	0.1228	1.6414	0.5892	2.3100e-003		0.0530	0.0530		0.0487	0.0487	0.0000	210.6659	210.6659	0.0656	0.0000	212.3054
Waste						0.0000	0.0000		0.0000	0.0000	203.1919	0.0000	203.1919	12.0083	0.0000	503.3994
Water						0.0000	0.0000		0.0000	0.0000	78.1249	723.7820	801.9069	8.0664	0.1982	1,062.6277
Total	**4.4816**	**2.3761**	**7.5234**	**0.0249**	**2.4935**	**0.0749**	**2.5683**	**0.6619**	**0.0696**	**0.7315**	**281.3168**	**3,790.5874**	**4,071.9042**	**20.2351**	**0.2093**	**4,640.1635**

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	4.0187	4.0000e-004	0.0432	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004	0.0000	0.0829	0.0829	2.3000e-004	0.0000	0.0886
Energy	0.0112	0.1018	0.0855	6.1000e-004		7.7400e-003	7.7400e-003		7.7400e-003	7.7400e-003	0.0000	866.2171	866.2171	0.0462	0.0111	870.6902
Mobile	0.3288	0.6325	6.8054	0.0220	2.4935	0.0140	2.5075	0.6619	0.0129	0.6749	0.0000	1,989.8395	1,989.8395	0.0485	0.0000	1,991.0521
Offroad	0.1228	1.6414	0.5892	2.3100e-003		0.0530	0.0530		0.0487	0.0487	0.0000	210.6659	210.6659	0.0656	0.0000	212.3054
Waste						0.0000	0.0000		0.0000	0.0000	203.1919	0.0000	203.1919	12.0083	0.0000	503.3994
Water						0.0000	0.0000		0.0000	0.0000	78.1249	723.7820	801.9069	8.0664	0.1982	1,062.6277
Total	**4.4816**	**2.3761**	**7.5234**	**0.0249**	**2.4935**	**0.0749**	**2.5683**	**0.6619**	**0.0696**	**0.7315**	**281.3168**	**3,790.5874**	**4,071.9042**	**20.2351**	**0.2093**	**4,640.1635**

	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	N20	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	3/16/2017	3/16/2017	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 20.49

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
Site Preparation	Rubber Tired Dozers	0	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37

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	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2017

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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
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
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**	**0.0000**	**0.0000**	**0.0000**

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	0.0000	0.0000	0.0000	0.0000	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**	**0.0000**	**0.0000**	**0.0000**

3.2 Site Preparation - 2017

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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
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
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**	**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**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

4.0 Operational Detail - Mobile

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	0.3288	0.6325	6.8054	0.0220	2.4935	0.0140	2.5075	0.6619	0.0129	0.6749	0.0000	1,989.8395	1,989.8395	0.0485	0.0000	1,991.0521
Unmitigated	0.3288	0.6325	6.8054	0.0220	2.4935	0.0140	2.5075	0.6619	0.0129	0.6749	0.0000	1,989.8395	1,989.8395	0.0485	0.0000	1,991.0521

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	1,107.48	1,107.48	1107.48	6,691,808	6,691,808
Total	1,107.48	1,107.48	1,107.48	6,691,808	6,691,808

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	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
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	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
Parking Lot	0.536558	0.040171	0.178324	0.131133	0.021173	0.005906	0.016602	0.058581	0.001315	0.001778	0.006379	0.000829	0.001251
Unrefrigerated Warehouse-No Rail	1.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

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	755.4063	755.4063	0.0440	9.1100e-003	759.2209
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	755.4063	755.4063	0.0440	9.1100e-003	759.2209
NaturalGas Mitigated	0.0112	0.1018	0.0855	6.1000e-004		7.7400e-003	7.7400e-003		7.7400e-003	7.7400e-003	0.0000	110.8108	110.8108	2.1200e-003	2.0300e-003	111.4693
NaturalGas Unmitigated	0.0112	0.1018	0.0855	6.1000e-004		7.7400e-003	7.7400e-003		7.7400e-003	7.7400e-003	0.0000	110.8108	110.8108	2.1200e-003	2.0300e-003	111.4693

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					
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	2.07652e+006	0.0112	0.1018	0.0855	6.1000e-004		7.7400e-003	7.7400e-003		7.7400e-003	7.7400e-003	0.0000	110.8108	110.8108	2.1200e-003	2.0300e-003	111.4693
Total		**0.0112**	**0.1018**	**0.0855**	**6.1000e-004**		**7.7400e-003**	**7.7400e-003**		**7.7400e-003**	**7.7400e-003**	**0.0000**	**110.8108**	**110.8108**	**2.1200e-003**	**2.0300e-003**	**111.4693**

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					
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	2.07652e+006	0.0112	0.1018	0.0855	6.1000e-004		7.7400e-003	7.7400e-003		7.7400e-003	7.7400e-003	0.0000	110.8108	110.8108	2.1200e-003	2.0300e-003	111.4693
Total		**0.0112**	**0.1018**	**0.0855**	**6.1000e-004**		**7.7400e-003**	**7.7400e-003**		**7.7400e-003**	**7.7400e-003**	**0.0000**	**110.8108**	**110.8108**	**2.1200e-003**	**2.0300e-003**	**111.4693**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Parking Lot	801504	180.9201	0.0105	2.1800e-003	181.8337
Unrefrigerated Warehouse-No Rail	2.54506e+006	574.4862	0.0335	6.9300e-003	577.3873
Total		**755.4063**	**0.0440**	**9.1100e-003**	**759.2209**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Parking Lot	801504	180.9201	0.0105	2.1800e-003	181.8337
Unrefrigerated Warehouse-No Rail	2.54506e+006	574.4862	0.0335	6.9300e-003	577.3873
Total		**755.4063**	**0.0440**	**9.1100e-003**	**759.2209**

6.0 Area Detail

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	4.0187	4.0000e-004	0.0432	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004	0.0000	0.0829	0.0829	2.3000e-004	0.0000	0.0886
Unmitigated	4.0187	4.0000e-004	0.0432	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004	0.0000	0.0829	0.0829	2.3000e-004	0.0000	0.0886

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	0.1078					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	3.9068					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.1300e-003	4.0000e-004	0.0432	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004	0.0000	0.0829	0.0829	2.3000e-004	0.0000	0.0886
Total	**4.0187**	**4.0000e-004**	**0.0432**	**0.0000**		**1.6000e-004**	**1.6000e-004**		**1.6000e-004**	**1.6000e-004**	**0.0000**	**0.0829**	**0.0829**	**2.3000e-004**	**0.0000**	**0.0886**

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	0.1078					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	3.9068					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.1300e-003	4.0000e-004	0.0432	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004	0.0000	0.0829	0.0829	2.3000e-004	0.0000	0.0886
Total	**4.0187**	**4.0000e-004**	**0.0432**	**0.0000**		**1.6000e-004**	**1.6000e-004**		**1.6000e-004**	**1.6000e-004**	**0.0000**	**0.0829**	**0.0829**	**2.3000e-004**	**0.0000**	**0.0886**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	801.9069	8.0664	0.1982	1,062.6277
Unmitigated	801.9069	8.0664	0.1982	1,062.6277

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	246.254 / 0	801.9069	8.0664	0.1982	1,062.6277
Total		**801.9069**	**8.0664**	**0.1982**	**1,062.6277**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	246.254 / 0	801.9069	8.0664	0.1982	1,062.6277
Total		**801.9069**	**8.0664**	**0.1982**	**1,062.6277**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	203.1919	12.0083	0.0000	503.3994
Unmitigated	203.1919	12.0083	0.0000	503.3994

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	1000.99	203.1919	12.0083	0.0000	503.3994
Total		**203.1919**	**12.0083**	**0.0000**	**503.3994**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	1000.99	203.1919	12.0083	0.0000	503.3994
Total		**203.1919**	**12.0083**	**0.0000**	**503.3994**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Tractors/Loaders/Backhoes	4	4.00	365	200	0.37	CNG

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	0.1228	1.6414	0.5892	2.3100e-003		0.0530	0.0530		0.0487	0.0487	0.0000	210.6659	210.6659	0.0656	0.0000	212.3054
Total	**0.1228**	**1.6414**	**0.5892**	**2.3100e-003**		**0.0530**	**0.0530**		**0.0487**	**0.0487**	**0.0000**	**210.6659**	**210.6659**	**0.0656**	**0.0000**	**212.3054**

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

Building 4 Operations Trucks

San Bernardino-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	1,064.88	1000sqft	41.55	1,064,880.00	0
Parking Lot	2,277.00	Space	20.49	910,800.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	32
Climate Zone	10			**Operational Year**	2018
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	497.64	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Building 4 Operations Trucks - San Bernardino-South Coast County, Annual

Project Characteristics - CPUC GHG Calculator version 3c, worksheet tab "CO2 Allocations," cells AH/AQ 35-44.

Land Use - Total lot acreage: 62.04; A trailer parking space requires significantly more space than one regular parking space. Therefore, for analysis purposes, 1 trailer parking=3.27 spaces

Construction Phase - Operation only

Off-road Equipment -

Off-road Equipment - Operation only

On-road Fugitive Dust - Operation only

Vehicle Trips - Based on traffic study and ITE Trip Generation Manual, 9th Edition

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Area Coating - Based on information provided by the Project engineer

Energy Use - Title-24 Electricity Energy Intensity and Title-24 Natural Gas Energy Intensity were adjusted by 5% (nonresidential) to reflect 2016 Title 24 requirements. Source: 2016 Building Energy Efficiency Standards Adoption Hearing (CEC 2015)

Fleet Mix - Trucks only

Operational Off-Road Equipment - All yard trucks are non-diesel

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Exterior	532440	202500
tblAreaCoating	Area_Nonresidential_Interior	1597320	207820
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	0.5
tblConstructionPhase	NumDays	40.00	1.00
tblEnergyUse	T24E	0.39	0.37
tblEnergyUse	T24NG	2.02	1.92
tblFleetMix	HHD	0.06	0.60
tblFleetMix	LDA	0.54	0.00
tblFleetMix	LDT2	0.18	0.00
tblFleetMix	LHD1	0.02	0.22

Building 4 Operations Trucks - San Bernardino-South Coast County, Annual

tblFleetMix	LHD2	5.9060e-003	0.00
tblFleetMix	MCY	6.3790e-003	0.00
tblFleetMix	MDV	0.13	0.00
tblFleetMix	MH	1.2510e-003	0.00
tblFleetMix	MHD	0.02	0.18
tblFleetMix	OBUS	1.3150e-003	0.00
tblFleetMix	SBUS	8.2900e-004	0.00
tblFleetMix	UBUS	1.7780e-003	0.00
tblLandUse	LotAcreage	24.45	41.55
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOnRoadDust	HaulingPercentPave	100.00	0.00
tblOnRoadDust	VendorPercentPave	100.00	0.00
tblOnRoadDust	WorkerPercentPave	100.00	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	OperLoadFactor	0.37	0.37
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	4.00
tblProjectCharacteristics	CO2IntensityFactor	702.44	497.64
tblVehicleTrips	CNW_TTP	41.00	0.00
tblVehicleTrips	CW_TL	16.60	40.00
tblVehicleTrips	CW_TTP	59.00	100.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00

tblVehicleTrips	ST_TR	1.68	0.64
tblVehicleTrips	SU_TR	1.68	0.64
tblVehicleTrips	WD_TR	1.68	0.64

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					
2017	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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					
2017	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

	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	N20	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	4.0187	4.0000e-004	0.0432	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004	0.0000	0.0829	0.0829	2.3000e-004	0.0000	0.0886
Energy	0.0112	0.1018	0.0855	6.1000e-004		7.7400e-003	7.7400e-003		7.7400e-003	7.7400e-003	0.0000	866.2171	866.2171	0.0462	0.0111	870.6902
Mobile	1.5378	46.9461	12.1172	0.1445	4.3481	0.3473	4.6954	1.2251	0.3321	1.5572	0.0000	13,796.0618	13,796.0618	0.5086	0.0000	13,808.7766
Offroad	0.1228	1.6414	0.5892	2.3100e-003		0.0530	0.0530		0.0487	0.0487	0.0000	210.6659	210.6659	0.0656	0.0000	212.3054
Waste						0.0000	0.0000		0.0000	0.0000	203.1919	0.0000	203.1919	12.0083	0.0000	503.3994
Water						0.0000	0.0000		0.0000	0.0000	78.1249	723.7820	801.9069	8.0664	0.1982	1,062.6277
Total	**5.6905**	**48.6897**	**12.8352**	**0.1474**	**4.3481**	**0.4081**	**4.7562**	**1.2251**	**0.3887**	**1.6139**	**281.3168**	**15,596.8096**	**15,878.1264**	**20.6952**	**0.2093**	**16,457.8880**

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	4.0187	4.0000e-004	0.0432	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004	0.0000	0.0829	0.0829	2.3000e-004	0.0000	0.0886
Energy	0.0112	0.1018	0.0855	6.1000e-004		7.7400e-003	7.7400e-003		7.7400e-003	7.7400e-003	0.0000	866.2171	866.2171	0.0462	0.0111	870.6902
Mobile	1.5378	46.9461	12.1172	0.1445	4.3481	0.3473	4.6954	1.2251	0.3321	1.5572	0.0000	13,796.0618	13,796.0618	0.5086	0.0000	13,808.7766
Offroad	0.1228	1.6414	0.5892	2.3100e-003		0.0530	0.0530		0.0487	0.0487	0.0000	210.6659	210.6659	0.0656	0.0000	212.3054
Waste						0.0000	0.0000		0.0000	0.0000	203.1919	0.0000	203.1919	12.0083	0.0000	503.3994
Water						0.0000	0.0000		0.0000	0.0000	78.1249	723.7820	801.9069	8.0664	0.1982	1,062.6277
Total	**5.6905**	**48.6897**	**12.8352**	**0.1474**	**4.3481**	**0.4081**	**4.7562**	**1.2251**	**0.3887**	**1.6139**	**281.3168**	**15,596.8096**	**15,878.1264**	**20.6952**	**0.2093**	**16,457.8880**

	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	N20	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	3/16/2017	3/16/2017	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 20.49

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
Site Preparation	Rubber Tired Dozers	0	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37

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	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2017

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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
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
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**	**0.0000**	**0.0000**	**0.0000**

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	0.0000	0.0000	0.0000	0.0000	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**	**0.0000**	**0.0000**	**0.0000**

3.2 Site Preparation - 2017

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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
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
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**	**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**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

4.0 Operational Detail - Mobile

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	1.5378	46.9461	12.1172	0.1445	4.3481	0.3473	4.6954	1.2251	0.3321	1.5572	0.0000	13,796.0618	13,796.0618	0.5086	0.0000	13,808.7766
Unmitigated	1.5378	46.9461	12.1172	0.1445	4.3481	0.3473	4.6954	1.2251	0.3321	1.5572	0.0000	13,796.0618	13,796.0618	0.5086	0.0000	13,808.7766

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	681.52	681.52	681.52	9,922,978	9,922,978
Total	681.52	681.52	681.52	9,922,978	9,922,978

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	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
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	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	0.000000	0.040171	0.000000	0.000000	0.220300	0.000000	0.176600	0.603100	0.000000	0.000000	0.000000	0.000000	0.000000
Parking Lot	0.536558	0.040171	0.178324	0.131133	0.021173	0.005906	0.016602	0.058581	0.001315	0.001778	0.006379	0.000829	0.001251

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	755.4063	755.4063	0.0440	9.1100e-003	759.2209
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	755.4063	755.4063	0.0440	9.1100e-003	759.2209
NaturalGas Mitigated	0.0112	0.1018	0.0855	6.1000e-004		7.7400e-003	7.7400e-003		7.7400e-003	7.7400e-003	0.0000	110.8108	110.8108	2.1200e-003	2.0300e-003	111.4693
NaturalGas Unmitigated	0.0112	0.1018	0.0855	6.1000e-004		7.7400e-003	7.7400e-003		7.7400e-003	7.7400e-003	0.0000	110.8108	110.8108	2.1200e-003	2.0300e-003	111.4693

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					
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	2.07652e+006	0.0112	0.1018	0.0855	6.1000e-004		7.7400e-003	7.7400e-003		7.7400e-003	7.7400e-003	0.0000	110.8108	110.8108	2.1200e-003	2.0300e-003	111.4693
Total		**0.0112**	**0.1018**	**0.0855**	**6.1000e-004**		**7.7400e-003**	**7.7400e-003**		**7.7400e-003**	**7.7400e-003**	**0.0000**	**110.8108**	**110.8108**	**2.1200e-003**	**2.0300e-003**	**111.4693**

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					
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	2.07652e+006	0.0112	0.1018	0.0855	6.1000e-004		7.7400e-003	7.7400e-003		7.7400e-003	7.7400e-003	0.0000	110.8108	110.8108	2.1200e-003	2.0300e-003	111.4693
Total		**0.0112**	**0.1018**	**0.0855**	**6.1000e-004**		**7.7400e-003**	**7.7400e-003**		**7.7400e-003**	**7.7400e-003**	**0.0000**	**110.8108**	**110.8108**	**2.1200e-003**	**2.0300e-003**	**111.4693**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Parking Lot	801504	180.9201	0.0105	2.1800e-003	181.8337
Unrefrigerated Warehouse-No Rail	2.54506e+006	574.4862	0.0335	6.9300e-003	577.3873
Total		**755.4063**	**0.0440**	**9.1100e-003**	**759.2209**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Parking Lot	801504	180.9201	0.0105	2.1800e-003	181.8337
Unrefrigerated Warehouse-No Rail	2.54506e+006	574.4862	0.0335	6.9300e-003	577.3873
Total		**755.4063**	**0.0440**	**9.1100e-003**	**759.2209**

6.0 Area Detail

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	4.0187	4.0000e-004	0.0432	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004	0.0000	0.0829	0.0829	2.3000e-004	0.0000	0.0886
Unmitigated	4.0187	4.0000e-004	0.0432	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004	0.0000	0.0829	0.0829	2.3000e-004	0.0000	0.0886

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	0.1078					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	3.9068					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.1300e-003	4.0000e-004	0.0432	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004	0.0000	0.0829	0.0829	2.3000e-004	0.0000	0.0886
Total	**4.0187**	**4.0000e-004**	**0.0432**	**0.0000**		**1.6000e-004**	**1.6000e-004**		**1.6000e-004**	**1.6000e-004**	**0.0000**	**0.0829**	**0.0829**	**2.3000e-004**	**0.0000**	**0.0886**

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	0.1078					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	3.9068					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.1300e-003	4.0000e-004	0.0432	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004	0.0000	0.0829	0.0829	2.3000e-004	0.0000	0.0886
Total	**4.0187**	**4.0000e-004**	**0.0432**	**0.0000**		**1.6000e-004**	**1.6000e-004**		**1.6000e-004**	**1.6000e-004**	**0.0000**	**0.0829**	**0.0829**	**2.3000e-004**	**0.0000**	**0.0886**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	801.9069	8.0664	0.1982	1,062.6277
Unmitigated	801.9069	8.0664	0.1982	1,062.6277

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	246.254 / 0	801.9069	8.0664	0.1982	1,062.6277
Total		**801.9069**	**8.0664**	**0.1982**	**1,062.6277**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	246.254 / 0	801.9069	8.0664	0.1982	1,062.6277
Total		**801.9069**	**8.0664**	**0.1982**	**1,062.6277**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	203.1919	12.0083	0.0000	503.3994
Unmitigated	203.1919	12.0083	0.0000	503.3994

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	1000.99	203.1919	12.0083	0.0000	503.3994
Total		**203.1919**	**12.0083**	**0.0000**	**503.3994**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	1000.99	203.1919	12.0083	0.0000	503.3994
Total		**203.1919**	**12.0083**	**0.0000**	**503.3994**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Tractors/Loaders/Backhoes	4	4.00	365	200	0.37	CNG

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	0.1228	1.6414	0.5892	2.3100e-003		0.0530	0.0530		0.0487	0.0487	0.0000	210.6659	210.6659	0.0656	0.0000	212.3054
Total	**0.1228**	**1.6414**	**0.5892**	**2.3100e-003**		**0.0530**	**0.0530**		**0.0487**	**0.0487**	**0.0000**	**210.6659**	**210.6659**	**0.0656**	**0.0000**	**212.3054**

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

APPENDIX 3.2:

EMFAC 2014 MODEL OUTPUTS

EMFAC2014 (v1.0.7) Emissions Inventory
Region Type: Statewide
Region: California
Calendar Year: 2018
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/day for VMT, trips/day for Trips, tons/day for Emissions, 1000 gallons/day for Fuel Co

Region	CalYr	VehClass	MdlYr	Speed	Fuel	Population	VMT	Fuel_Consu
Statewide	2018	HHDT	Aggregated	Aggregated	GAS	1904.615	239714.3	52.89096
Statewide	2018	HHDT	Aggregated	Aggregated	DSL	267614.9	38803846	6719.239
Statewide	2018	LDA	Aggregated	Aggregated	GAS	13961926	5.07E+08	18976.6
Statewide	2018	LDA	Aggregated	Aggregated	DSL	127349.6	4940630	141.2938
Statewide	2018	LDA	Aggregated	Aggregated	ELEC	142695.6	7113093	0
Statewide	2018	LHDT1	Aggregated	Aggregated	GAS	354806.4	10637555	1057.162
Statewide	2018	LHDT1	Aggregated	Aggregated	DSL	313894.2	10807600	600.4672
Statewide	2018	MHDT	Aggregated	Aggregated	GAS	40500.84	2039011	307.8221
Statewide	2018	MHDT	Aggregated	Aggregated	DSL	298439.8	15479998	1836.479

onsumption

Fuel Consumption	Total VMT	Total Fuel Consum	Miles Per Gallon
52,890.96	39,043,559.85	6,772,130.07	5.77
6,719,239.11			
18,976,603.53	511,741,971.27	19,117,897.35	26.77
141,293.82			
-	17,750,648.66	1,057,162.09	16.79
1,057,162.09	21,445,155.28	1,657,629.32	12.94
600,467.23			
307,822.07	17,519,008.01	2,144,300.98	8.17
1,836,478.91			