

Appendix B

Air Quality and Greenhouse Gas Emissions

1000 Seward

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Appendix B-1-Air Quality and Greenhouse Gas
Emissions Methodology

AIR QUALITY AND GREENHOUSE GAS EMISSIONS METHODOLOGY

1000 Seward

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1000 Seward Project

Air Quality and Greenhouse Gas Emissions Methodology

1. Introduction

Eyestone Environmental has been retained to conduct a comprehensive greenhouse gas (GHG) and criteria air pollutant emissions assessment for the 1000 Seward Project (the “Project”). Emissions during both construction and operation of the Project were quantified. This assessment describes the methodology used to estimate the GHG and air pollutant emissions from existing and Project conditions and describes the methodology used to quantify GHG and air pollutant emission reductions from project design features and mitigation measures.

2. Air Pollutant and Greenhouse Gas Emissions Methodology

The Project would result in direct emissions of criteria pollutants and direct and indirect GHG emissions generated by different types of emissions sources, including:¹

- Direct Emissions:
 - Construction: emissions associated with demolition of existing uses, shoring, excavation, grading, and construction-related equipment and vehicular activity;
 - Area source: emissions associated with consumer products, architectural coatings, and landscape equipment;
 - Energy source (building operations): emissions associated with space heating and cooling, and water heating;

¹ *Direct sources of emissions include Project-related vehicular trips and onsite combustion of fossil fuels (e.g., natural gas, propane, gasoline, and diesel). Whereas, indirect sources of emissions include offsite emissions associated with purchased electricity and embodied energy (e.g., energy used to convey, treat, and distribute water and wastewater)*

- Mobile source: emissions associated with vehicles accessing the project site; and
- Stationary source: emissions associated with stationary equipment (e.g., emergency generators).
- Indirect Emissions:
 - Energy source (building operations): emissions associated with energy consumption, and lighting;
 - Solid Waste: emissions associated with the decomposition of the waste, which generates methane based on the total amount of degradable organic carbon; and
 - Water/Wastewater: emissions associated with energy used to pump, convey, deliver, and treat water.

a. Emission Inventories

Project-related construction and operation emissions were calculated using SCAQMD’s recommended California Emissions Estimator Model (CalEEMod). CalEEMod is a statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant and GHG emissions associated with both construction and operations from a variety of land use projects. CalEEMod was developed in collaboration with the air districts of California. Data (e.g., emission factors, trip lengths, meteorology, source inventory, etc.) have been provided by the various California air districts to account for local requirements and conditions. The model is considered by the SCAQMD to be an accurate and comprehensive tool for quantifying criteria pollutant and GHG impacts from land use projects throughout California.²

CalEEMod utilizes widely accepted models for emission estimates combined with appropriate default data that can be used if site-specific information is not available. These models and default estimates use sources such as the USEPA AP-42 emission factors, CARB’s on-road emission model (EMission FACTor model (EMFAC)) and off-road equipment emission model (Off-road Emissions Inventory Program model (OFFROAD)).

² See www.caleemod.com.

(1) Construction

Construction activities would generate emissions from off-road equipment usage, on-road vehicle travel (truck hauling, vendor deliveries, and workers commuting), architectural coating, and paving. Each of these source types is discussed in more detail below. The Project's construction emissions were calculated using the SCAQMD recommended CalEEMod (Version 2020.4.0). Please refer to CalEEMod construction output files for a complete listing of construction details modeled. CalEEMod default values were used for equipment and vehicle emission factors, equipment load factors and vehicle trip lengths. It should be noted that the maximum daily emissions were predicted values for the worst-case day and do not represent the emissions that would occur for every day of Project construction. The maximum daily emissions were compared to the SCAQMD daily regional numeric indicators. Annual emissions were calculated based on the total number of hours each piece of equipment was used and the total number of vehicular trips (i.e., worker, vendor, and haul) over the duration of construction. In accordance with the SCAQMD's guidance, GHG emissions from construction were amortized over the lifetime of the Project. The SCAQMD defines the lifetime of a project as 30 years.³ Therefore, total construction GHG emissions were divided by 30 to determine an annual construction emissions estimate comparable to operational emissions.

(a) Emissions from Construction Equipment

The emission calculations associated with construction equipment are from off-road equipment engine use based on the equipment list and phase length. Since the majority of the off-road construction equipment used for construction projects are diesel fueled, CalEEMod assumes all of the equipment operates on diesel fuel. Construction equipment emissions vary with engine model years in which newer equipment will emit fewer pollutants. As a conservative assumption, the CalEEMod model uses an emission rate for equipment which represents an average model year for available equipment within the Air Basin. CalEEMod calculates the exhaust emissions based on CARB OFFROAD methodology using the equation presented below.

Construction Off-Road Equipment:

$$\text{Emissions Diesel [lbs]} = \left(\sum_i (\text{EF}_i \times \text{Pop}_i \times \text{AvgHP}_i \times \text{Load}_i \times \text{Activity}_i) \right)$$

Where: EF_i = Emission factor from OFFROAD (lbs/hr)

Pop_i = Population (quantity of same equipment)

³ SCAQMD, *Interim CEQA GHG Significance Threshold for Stationary Sources, Rules and Plans*, 2008.

- AvgHP_i = Maximum rated average horsepower (hp)
 Load_i = Load Factor (dimensionless)
 Activity_i = Hours of operation (hours)
i = Summation index

Fugitive dust emissions from use of off-road equipment were also calculated using CalEEMod based on the types of equipment used during grading activities and based on the amount of import/export from loading or unloading dirt into haul trucks. These methods have been adapted from USEPA's AP-42 method for Western Coal Mining. As recommended by SCAQMD, the fugitive dust emissions from the grading phase are calculated using the methodology described in USEPA AP-42. PM₁₀ and PM_{2.5} emissions from fugitive dust will be controlled by watering the construction site three times a day consistent with SCAQMD Rule 403 and were estimated to be reduced by 61 percent.

(b) Emissions from On-Road Trips

Construction generates on-road vehicle exhaust, evaporative, and dust emissions from personal vehicles for worker commuting, vendor deliveries, and trucks for soil and material hauling. These emissions are based on the number of trips and VMT along with emission factors from EMFAC. The emissions from mobile sources were calculated with the trip rates, trip lengths and emission factors for running from EMFAC as follows:

Construction On-Road Equipment:

Emissions pollutant (lbs) = VMT * EF running, pollutant

Where: VMT = vehicle miles traveled (miles)

EF running,pollutant = emission factor for running emissions (lbs/VMT)

Evaporative emissions, starting and idling emissions in CalEEMod were calculated by multiplying the number of trips times the respective emission factor for each pollutant.

(c) Emissions from Architectural Coating

VOC off-gassing emissions result from evaporation of solvents contained in surface coatings. CalEEMod calculates the VOC evaporative emissions from application of residential and non-residential surface coatings using the following equation:

Construction Architectural Coating Emissions:

$$\text{Emissions Architectural Coatings (lbs)} = \text{EF}_{\text{AC}} \times F \times A_{\text{paint}}$$

Where: EF_{AC} = Emission Factor (lb/sf)

A_{paint} = Building Surface Area (sf)

The CalEEMod tool assumes the total surface for painting equals 2.7 times the floor square footage for residential and 2 times that for nonresidential square footage. All of the land use information provided by a metric other than square footage will be converted to square footage using the default conversions or user defined equivalence.

F = fraction of surface area [%].

The default values based on SCAQMD methods used in their coating rules are 75 percent for the interior surfaces and 25 percent for the exterior shell. Parking areas are based on 6-percent coverage.

The emission factor (EF) is based on the VOC content of the surface coatings and is calculated estimated using the equation below:

$$\text{EF}_{\text{AC}} = C_{\text{VOC}}/454(\text{g/lb}) \times 3.785(\text{L/gal})/180(\text{sf})$$

Where: EF = emission factor (lb/sf)

C = VOC content (g/L or gram per liter)

The emission factors for coating categories were calculated using the equation above based on default VOC content from provided by the air districts or CARB's statewide limits in CalEEMod. Architectural coating VOC emission factors are also consistent with SCAQMD Rule 1113 as discussed above.

(d) Emissions from Paving

CalEEMod estimates VOC off-gassing emissions associated with asphalt paving of parking lots using the following equation:

$$\text{Emissions}_{\text{SAP}} (\text{lbs}) = \text{EF}_{\text{AP}} \times A_{\text{parking}}$$

Where: EF = emission factor (lb/acre)

A = area of the parking lot (acre)

Note: The Sacramento Metropolitan Air Quality Management District (SMAQMD) default emission factor is 2.62 lb/acre.

(2) Operation

Similar to construction, the SCAQMD-recommended CalEEMod was used to calculate potential emissions generated by the Project, including area source, energy sources (electricity and natural gas), mobile source, stationary sources (emergency generator), solid waste generation and disposal, and water usage/wastewater generation.

(3) Area Source Emissions

Area source emissions were calculated using the CalEEMod emissions inventory model, which includes consumer products, architectural coatings, and landscape maintenance equipment. Pollutant emissions generated by the Project were calculated using CalEEMod defaults, based upon the land uses that will be included in each project.

Consumer products are chemically formulated products used by household and institutional consumers, including, but not limited to, detergents; cleaning compounds; polishes; floor finishes; cosmetics; personal care products; home, lawn, and garden products; disinfectants; sanitizers; aerosol paints; and automotive specialty products; but does not include other paint products, furniture coatings, or architectural coatings. SCAQMD did an evaluation of consumer product use compared to the total square footage of buildings using data from CARB consumer product Emission Inventory. To calculate the VOC emissions from consumer product use, the following equation was used in CalEEMod:

$$\text{Emissions Consumer Products (lbs)} = \text{EF}_{\text{CP}} \times \text{Building Area}$$

Where:

EF_{CP} = pounds of VOC per building square foot

The factor is 1.98×10^{-5} lbs/sf for SCAQMD areas.

Building Area = the total square footage of all buildings including residential square footage

VOC off-gassing emissions result from evaporation of solvents contained in surface coatings such as in paints and primers. The operational emission methodology from architecture coating is the same as the construction methodology discussed above. All land

use buildings are assumed to be repainted at a rate of 10 percent of area per year. This is based on the assumptions used by SCAQMD.

The combustion of fossil fuels to operate landscape equipment such as lawnmowers and trimmers, results in pollutant emissions. The emissions occur on-site and are considered a direct source of pollutant emissions. The emissions for landscaping equipment are based on the size of the land uses, the pollutant emission factors for fuel combustion. Pollutant emissions from landscaping equipment are generally calculated in CalEEMod as follows:

Landscaping Equipment:

$$\text{Landscaping Equipment Emissions [lbs]} = (\sum_i (\text{Units} \times \text{EF}_{\text{LE}} \times \text{ALE})_i)$$

Where: Units = Number of land use units (same land use type) [1,000 sf]

EF_{LE} = Emission factor [grams (g)/1,000 sfday]

i = Summation index

Note: For residential land uses, emission factors are specified in units of dwelling units (DU) instead of 1,000 sf.

(4) Energy Emissions (Electricity and Natural Gas)

Pollutant emissions are emitted as a result of activities in buildings when electricity and natural gas are used as energy sources. Combustion of any type of fuel emits pollutant emissions directly into the atmosphere; when this occurs in a building, it is a direct emission source associated with that building. Pollutant emissions are also emitted during the generation of electricity from fossil fuels. When electricity is used in a building, the electricity generation typically takes place off-site at the power plant; electricity use in a building generally causes emissions in an indirect manner.

Energy demand emissions were calculated using the CalEEMod emissions inventory model. 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. CalEEMod calculates energy use from systems covered by Title 24 Building Energy Efficiency Standards (e.g., heating, ventilation, and air conditioning [HVAC] system, water heating system, and lighting system); energy use from lighting; and energy use from office equipment, appliances, plug-ins, and other sources not covered by Title 24 or lighting.

CalEEMod energy demand is based on the California Energy Commission (CEC) sponsored California Commercial End Use Survey (CEUS) study.⁴ The data is specific for climate zones and, therefore, Zone 11 was selected for the Project Site based on the ZIP Code tool. CalEEMod currently assumes 2016 Title 24 Energy Efficiency Standards when calculating project energy usage. In order to account for 2019 Title 24 Energy Efficiency Standards, energy consumption was conservatively assumed to be 10 percent more efficient than the 2016 Building Energy Efficiency Standards requirements.

(a) Electricity

Because power plants are existing stationary sources permitted by air districts and/or the USEPA, criteria pollutant emissions are generally associated with the power plants themselves, and not individual buildings or electricity users. Additionally, criteria pollutant emissions from power plants are subject to local, state, and federal control measures, which can be considered to be the maximum feasible level of mitigation for stack emissions. In contrast, GHG emissions from power plants are not subject to stationary source permitting requirements to the same degree as criteria pollutants. As such, GHGs emitted by power plants may be indirectly attributed to individual buildings and electricity users, who have the greatest ability to decrease usage by applying mitigation measures to individual electricity “end uses.” CalEEMod therefore calculates GHG emissions (but not criteria pollutant emissions) from regional power plants associated with building electricity use.

Emissions associated with electricity demand are based on the size of the residential, commercial and retail land uses, the electrical demand factors for the land uses, the emission factors for the electricity utility provider, and the GWP values for the GHGs emitted. Annual electricity GHG emissions in units of MTCO_{2e} are calculated as follows:

⁴ CEC, *Commercial End-Use Survey, March 2006.*

Electricity:

$$\text{Annual Emissions [MTCO}_2\text{e]} = \left(\sum_i (\text{Units} \times D_E \times EF_E \times \text{GWP})_i \right) \div 2,204.62$$

Where: Units = Number of land use units (same land use type) [1,000 sf]

D_E = Electrical demand factor [megawatt-hour (MWh)/1,000 sf/yr]

EF_E = GHG emission factor [pounds per megawatt-hour (MWh)]

GWP = Global warming potential [$\text{CO}_2 = 1$, $\text{CH}_4 = 21$, $\text{N}_2\text{O} = 310$]

2,204.62 = Conversion factor [pounds/MT]

i = Summation index

Note: For residential land uses, emission factors are specified in units of dwelling units (DU) instead of 1,000 sf.

GHG emissions from electricity use are directly dependent on the electricity utility provider. The Los Angeles Department of Water and Power (LADWP) provides electric service to the Project Site. Thus, GHG intensity factors for LADWP were selected in CalEEMod. Intensity factors for GHGs due to electrical generation to serve the electrical demands of the existing condition were obtained from the LADWP 2017 Power Integrated Resource Plan, which provides a CO_2 intensity of 801 pounds of CO_2 per MWh for 2019. By 2030, at least 50 percent of electricity shall be obtained from renewable sources. The 2016 Power Integrated Resource Plan estimates that the LADWP CO_2 intensity would be 500 pounds of CO_2 per MWh by Year 2026.⁵ As year-by-year data is currently not available, the CO_2 intensity factor for the Project buildout was determined based on straight line extrapolation based on current and Year 2026 data points (770 pounds of CO_2 per MWh for Year 2020 and 616 pounds of CO_2 per MWh for Year 2025).

(b) Natural Gas

The direct source emissions associated with natural gas combustion are based on the size of the land uses and the natural gas combustion factors for the land uses in units of million British thermal units (MMBtu). Natural gas emissions are calculated in CalEEMod as follows:

⁵ 2016 Final Power Integrated Resource Plan, Figure 4-7. LADWP. December 2016.

Natural Gas:

$$\text{Natural Gas Emissions (lbs)} = (\sum_i (\text{Units} \times D_{\text{NG}} \times EF_{\text{NG}})_i)$$

Where: Units = Number of land use units (same land use type) [1,000 sf]
 D_{NG} = Natural Gas combustion factor [MMBtu/1,000 sf]
 EF_{NG} = Natural Gas combustion factor [pounds/MMBtu]
 i = Summation index

Note: For residential land uses, emission factors are specified in units of dwelling units (DU) instead of 1,000 sf.

(5) Mobile Source Emissions

Mobile-source emissions were calculated using the CalEEMod emissions inventory model. CalEEMod calculates the emissions associated with on-road mobile sources associated with residents, employees, visitors, and delivery vehicles visiting the Project Site based on the number of daily trips generated and vehicle miles traveled (VMT). The Traffic Study prepared by Gibson Transportation Consulting had calculated Project VMT which was entered into CalEEMod in calculating Project mobile source emissions.

Modeling was also conducted using the Los Angeles County vehicle fleet mix for all vehicle types as provided in EMFAC2014.

Mobile source emissions were generally calculated in CalEEMod as follows:

Mobile:

$$\text{Mobile Emissions [lbs]} = (\sum_i (\text{Units} \times \text{ADT} \times D_{\text{TRIP}} \times EF_i))$$

Where: Units = Number of vehicles (same vehicle model year and class)
ADT = Average daily trip rate [trips/day]
 D_{TRIP} = Trip distance [miles/trip]
EF = Pollutant emission factor [pounds per mile]
 i = Summation index

Note: For residential land uses, emission factors are specified in units of dwelling units (DU) instead of 1,000 sf.

Mobile source operational emissions were calculated based on the Project VMT estimates provided by Gibson Transportation Consulting.⁶ As discussed in Section IV.G, Transportation, of this Draft EIR, to calculate peak daily trip estimates, the Los Angeles Department of Transportation (LADOT) VMT Calculator was used.

Previously, trip generation for land uses was calculated based on survey data collected by the Institute of Transportation Engineers (ITE). However, these ITE trip generation rates were based on data collected at suburban, single-use, free standing sites, which may not be representative of urban mixed-use environments. Beginning in 2019, the USEPA has sponsored a study to collect travel survey data from mixed-use developments in order provide a more representative trip generation rate for multi-use sites. Results of the USEPA survey indicate that trip generation and VMT are affected by factors such as resident and job density, availability of transit, and accessibility of biking and walking paths. Based on these factors, the USEPA has developed equations known as the EPA Mixed-Use Development (MXD) model to calculate trip reductions for multi-use developments.⁷ The LADOT VMT Calculator incorporates the USEPA MXD model and accounts for project features such as increased density and proximity to transit, which would reduce VMT and associated fuel usage in comparison to free-standing sites.

The Project design includes characteristics that would reduce trips and VMT as compared to a standard project within the air basin as measured by the air quality model (CalEEMod). While these Project characteristics primarily reduce greenhouse gas emissions, they would also reduce criteria air pollutants discussed herein. These relative reductions in vehicle trips and VMT from a standard project within the air basin help quantify the criteria air pollutant emissions reductions achieved by locating the Project in any infill, HQTAs area that promotes alternative modes of transportation. A ratio of ITE trip generation rates for weekend and weekday scenarios was used to estimate Project VMT during weekend conditions.

(6) Stationary Source (Emergency Generator Emissions)

Emissions of GHGs associated with use of emergency generators were calculated using CalEEMod, in which emission factors are based on Table 3.4-1 (Gaseous Emission Factors for Large Stationary Diesel Engines) from EPA's AP-42: Compilation of Air Pollutant Emission Factors. The emissions are based on the horsepower rating of the

⁶ *Transportation Impact Study for the 1000 Seward Project, Gibson Transportation Consulting. November 2020.*

⁷ *Environmental Protection Agency, Mixed-Use Trip Generation Model. www.epa.gov/smartgrowth/mixed-use-trip-generation-model. Accessed December 16, 2020.*

diesel generator and the number of hours operated per year for testing purposes. Annual emergency generator GHG emissions in units of MTCO_{2e} were calculated as follows:

Emergency Generator:

$$\text{Emissions [lbs]} = (\text{Total HP} \times \text{LF} \times \text{HR} \times \text{EF})$$

Where: Total HP = Total horsepower of emergency generators (Hp)

LF = Load Factor (CalEEMod default of 0.73)

HR = Hours Operated per Year

EF = AP-42 Emission Factor of 1.16 lb/hp-hr)

(7) Solid Waste Emissions

The generation of municipal solid waste (MSW) from day-to-day operational activities generally consists of product packaging, grass clippings, furniture, clothing, bottles, food scraps, newspapers, plastic, and other items routinely disposed of in trash bins. A portion of the MSW is diverted to waste recycling and reclamation facilities. Waste that is not diverted is usually sent to local landfills for disposal. MSW that is disposed in landfills results in GHG emissions of CO₂ and CH₄ from the decomposition of the waste that occurs over the span of many years.

Emissions of GHGs associated with solid waste disposal were calculated using the CalEEMod emissions inventory model. The emissions are based on the size of the retail and restaurant land uses, the waste disposal rate for the land uses, the waste diversion rate, the GHG emission factors for solid waste decomposition, and the GWP values for the GHGs emitted. Annual waste disposal GHG emissions in units of MTCO_{2e} were calculated in CalEEMod as follows:

Solid Waste:

$$\text{Annual Emissions [MTCO}_2\text{e]} = (\sum_i (\text{Units} \times D_{\text{MSW}} \times EF_{\text{MSW}} \times \text{GWP})_i) \div 1.1023$$

Where: Units = Number of land use units (same land use type) [1,000 sf]

D_{MSW} = Waste disposal rate [tons/1,000 sf/yr]

EF_{MSW} = GHG emission factor [tons/ton waste]

GWP = Global warming potential [$\text{CO}_2 = 1$, $\text{CH}_4 = 21$, $\text{N}_2\text{O} = 310$]

1.1023 = Conversion factor [tons/MT]

i = Summation index

Note: For residential land uses, emission factors are specified in units of dwelling units (DU) instead of 1,000 sf.

CalEEMod allows the input of several variables to quantify solid waste emissions. The model requires the amount of waste disposed, which is the product of the waste disposal rate times the land use units. CalEEMod default annual solid waste disposal rates used. The GHG emission factors, particularly for CH_4 , depend on characteristics of the landfill, such as the presence of a landfill gas capture system and subsequent flaring or energy recovery. The default values, as provided in CalEEMod, for landfill gas capture (e.g., no capture, flaring, energy recovery), which are statewide averages, were used in this assessment. The Project includes a 76.4-percent recycling/diversion rate currently achieved within the City.⁸

(8) Water Usage and Wastewater Generation Emissions

GHG emissions are related to the energy used to convey, treat, and distribute water and wastewater. Thus, these emissions are generally indirect emissions from the production of electricity to power these systems. Three processes are necessary to supply potable water and include: (1) supply and conveyance of the water from the source; (2) treatment of the water to potable standards; and (3) distribution of the water to individual users. After use, energy is used as the wastewater is treated and reused as reclaimed water.

Emissions related to water usage and wastewater generation were calculated using the CalEEMod emissions inventory model. The emissions are based on the size of the

⁸ City of Los Angeles, Sustainable City pLAN, Waste & Landfills, <http://plan.lamayor.org/portfolio/waste-landfills-3rd>, accessed February 21, 2019.

land uses, the water demand factors, the electrical intensity factors for water supply, treatment, and distribution and for wastewater treatment, the GHG emission factors for the electricity utility provider, and the GWP values for the GHGs emitted. CalEEMod default annual water demand and wastewater rates were used. GHG emissions due to electricity are calculated in CalEEMod as follows for indoor and outdoor water demand:

Water Supply, Treatment, and Distribution; Wastewater Treatment (electricity):

$$\text{Annual Emissions [MTCO}_2\text{e]} = \frac{(\sum_i (\text{Units} \times D_w \times (\text{El}_w \div 1,000) \times \text{EF}_w \times \text{GWP})_i)}{2,204.62}$$

Where: Units	=	Number of land use units (same land use type) [1,000 sf]
D_w	=	Water demand factor [million gallons (Mgal)/1,000 sf/yr]
El_w	=	Electricity intensity factor [kilowatt-hours (kWh)/Mgal]
1,000	=	Conversion factor [kWh/MWh]
EF_w	=	GHG emission factor [pounds/MWh]
GWP	=	Global warming potential [$\text{CO}_2 = 1$, $\text{CH}_4 = 21$, $\text{N}_2\text{O} = 310$]
2,205	=	Conversion factor [pounds/MT]
i	=	Summation index

Note: For residential land uses, emission factors are specified in units of dwelling units (DU) instead of 1,000 sf.

CalEEMod provides options to account for the use of water saving features such as the use of low-flow water fixtures (e.g., low-flow faucets, low-flow toilets). The same electricity GHG emissions factors discussed above were used for water and wastewater energy usage. In addition, the calculation of Project GHG emissions from water/wastewater usage accounts for a 20 percent reduction in water/wastewater emissions with implementation of Project Design Features WAT-PDF-1 provided in Section IV.I.1, Utilities and Service Systems—Water Supply and Infrastructure, of this Draft EIR.

b. Post-2030 Analysis

Recent studies show that the State's existing and proposed regulatory framework will put the State on a pathway to reduce its GHG emissions level to 40 percent below 1990 levels by 2030, and to 80 percent below 1990 levels by 2050 if additional appropriate

reduction measures are adopted.⁹ Even though these studies did not provide an exact regulatory and technological roadmap to achieve the 2030 and 2050 goals, they demonstrated that various combinations of policies could allow the Statewide emissions level to remain very low through 2050.

Subsequent to the findings of these studies, SB 32 was passed on September 8, 2016, which would require the State board to ensure that Statewide GHG emissions are reduced to 40 percent below the 1990 level by 2030. The new plan outlined in SB 32 involves increasing renewable energy use, imposing tighter limits on the carbon content of gasoline and diesel fuel, putting more electric cars on the road, improving energy efficiency, and curbing emissions from key industries. An evaluation was provided to determine whether the Project's design features advanced these goals by reducing VMT, increasing the use of electric vehicles, improving energy efficiency and reducing water usage.

Further, an evaluation of the Project's consistency with SCAG's RTP/SCS was provided to demonstrate that the Project will be consistent with post-2020 GHG reduction goals. In March 2018, CARB adopted updated targets requiring a 19-percent decrease in per capita passenger vehicle GHG emissions for the SCAG region by 2035. The 2020-2045 RTP/SCS is expected to fulfill and exceed SB 375 compliance with respect to meeting the State's GHG emission reduction goals.

⁹ *Energy and Environmental Economics (E3). "Summary of the California State Agencies' PATHWAYS Project: Long-term Greenhouse Gas Reduction Scenarios" (April 2015); Greenblatt, Jeffrey, Energy Policy, "Modeling California Impacts on Greenhouse Gas Emissions" (Vol. 78, pp. 158–172). The California Air Resources Board, California Energy Commission, California Public Utilities Commission, and the California Independent System Operator engaged E3 to evaluate the feasibility and cost of a range of potential 2030 targets along the way to the state's goal of reducing GHG emissions to 80 percent below 1990 levels by 2050. With input from the agencies, E3 developed scenarios that explore the potential pace at which emission reductions can be achieved, as well as the mix of technologies and practices deployed. E3 conducted the analysis using its California PATHWAYS model. Enhanced specifically for this study, the model encompasses the entire California economy with detailed representations of the buildings, industry, transportation and electricity sectors.*

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Appendix B-2-Air Quality Worksheets and Modeling Output Files

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Air Quality Emissions Summary

AQ SUMMARY OF EMISSIONS							
Construction Emissions (Unmitigated)							
Regional (Daily) Unmitigated		ROG	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
	2022	3	80	25	0	9	3
	2023	4	63	37	0	9	3
	2024	17	30	42	0	7	3
	MAX	17	80	42	<1	9	3
	Threshold	75	100	550	150	150	55
	Difference	(58)	(20)	(508)	(150)	(141)	(52)
	Impact	No	No	No	No	No	No
Localized (Daily) Unmitigated		ROG	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
	2022		17	11		1	1
	2023		25	28		1	1
	2024		17	25		<1	<1
	MAX		25	28		1	1
	Threshold		74	680		5	3
	Difference		(49)	(652)		(4)	(2)
	Impact		No	No		No	No

Operation Emissions (Without Mitigation Measures)

Regional Baseline (Existing Year)		ROG	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
	Area	<1	<1	<1	<1	<1	<1
	Energy	<1	<1	<1	<1	<1	<1
	Mobile	<1	<1	7	<1	1	<1
	Emergency Generator	<1	<1	<1	<1	<1	<1
	Total	<1	1	7	<1	1	<1
Regional Baseline (Buildout Year)		ROG	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
	Area	<1	<1	<1	<1	<1	<1
	Energy	<1	<1	<1	<1	<1	<1
	Mobile	<1	<1	5	<1	1	<1
	Emergency Generator	<1	<1	<1	<1	<1	<1
	Total	<1	<1	6	<1	1	<1
Regional Buildout (Buildout Year)		ROG	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
	Area	3	<1	<1	<1	<1	<1
	Energy	<1	1	<1	<1	<1	<1
	Mobile	4	4	38	<1	9	2
	Emergency Generator	<1	<1	<1	<1	<1	<1
	Total	8	6	40	<1	9	3
Project Regional (Buildout Less Baseline (Buildout Year))							
		ROG	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
	Area	3	<1	<1	<1	<1	<1
	Energy	<1	<1	<1	<1	<1	<1
	Mobile	3	4	33	<1	8	2
	Emergency Generator	<1	<1	<1	<1	<1	<1
	Total	7	5	34	<1	8	2
	Threshold	55	55	550	150	150	55
	Difference	(48)	(50)	(516)	(150)	(142)	(53)
	Impact	No	No	No	No	No	No
Project Localized (Buildout Less Baseline (Buildout Year))							
	Onsite Total		2	1.4		0.10	0.10
	Threshold		74	680		1	1.0
	Difference		(72)	(679)		(1)	(1)
	Impact		No	No		No	No

1000 Seward Project (Existing Conditions) - Los Angeles-South Coast County, Winter
EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

1000 Seward Project (Existing Conditions)
Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	8.44	1000sqft	0.19	8,442.00	0
User Defined Commercial	1.00	User Defined Unit	0.00	0.00	0
High Turnover (Sit Down Restaurant)	2.55	1000sqft	0.06	2,551.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	12			Operational Year	2020
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MWhr)	770	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

- Project Characteristics - Consistency with SB100 RPS for LADWP.
- Land Use - Rest = 2,551 sf
- Construction Phase - Site Specific Schedule
- Off-road Equipment - Site Specific
- Off-road Equipment - Site Specific
- Trips and VMT - Site Specific
- Demolition -
- Grading -
- Vehicle Trips - Site Specific
- Energy Use - Consistency with Section 120.6(c) CBC
- Construction Off-road Equipment Mitigation -
- Mobile Commute Mitigation -
- Energy Mitigation -
- Water Mitigation -
- Waste Mitigation -
- Stationary Sources - Emergency Generators and Fire Pumps -
- Stationary Sources - Emergency Generators and Fire Pumps EF - SCAQMD BACT
- Vehicle Emission Factors -
- Vehicle Emission Factors -
- Vehicle Emission Factors -
- Fleet Mix -

Table Name	Column Name	Default Value	New Value
tblLandUse	LandUseSquareFeet	8,440.00	8,442.00
tblLandUse	LandUseSquareFeet	2,550.00	2,551.00
tblProjectCharacteristics	CH4IntensityFactor	0.033	0.029
tblProjectCharacteristics	CO2IntensityFactor	691.98	770
tblProjectCharacteristics	N2OIntensityFactor	0.004	0.006
tblVehicleTrips	CC_TL	8.40	7.35
tblVehicleTrips	CC_TTP	0.00	100.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CW_TL	16.60	0.00

1000 Seward Project (Existing Conditions) - Los Angeles-South Coast County, Winter

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

tblVehicleTrips	PR_TR	0.00	100.00
tblVehicleTrips	ST_TR	2.21	0.00
tblVehicleTrips	ST_TR	122.40	0.00
tblVehicleTrips	ST_TR	0.00	227.00
tblVehicleTrips	SU_TR	0.70	0.00
tblVehicleTrips	SU_TR	142.64	0.00
tblVehicleTrips	SU_TR	0.00	183.00
tblVehicleTrips	WD_TR	9.74	0.00
tblVehicleTrips	WD_TR	112.18	0.00
tblVehicleTrips	WD_TR	0.00	223.00

2.0 Emissions Summary

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	lb/day										lb/day					
Area	0.2457	1.0000e-005	1.2300e-003	0.0000		0.0000	0.0000		0.0000	0.0000						2.8000e-003
Energy	0.0199	0.1812	0.1522	1.0900e-003		0.0138	0.0138		0.0138	0.0138						218.7325
Mobile	0.7127	0.9359	6.9723	0.0133	1.2786	0.0149	1.2935	0.3406	0.0139	0.3545						1,374.1009
Total	0.9783	1.1171	7.1258	0.0144	1.2786	0.0287	1.3072	0.3406	0.0277	0.3683						1,592.8363

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	lb/day										lb/day					
Area	0.2457	1.0000e-005	1.2300e-003	0.0000		0.0000	0.0000		0.0000	0.0000						2.8000e-003
Energy	0.0199	0.1812	0.1522	1.0900e-003		0.0138	0.0138		0.0138	0.0138						218.7325
Mobile	0.7127	0.9359	6.9723	0.0133	1.2786	0.0149	1.2935	0.3406	0.0139	0.3545						1,374.1009
Total	0.9783	1.1171	7.1258	0.0144	1.2786	0.0287	1.3072	0.3406	0.0277	0.3683						1,592.8363

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

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

1000 Seward Project (Existing Conditions) - Los Angeles-South Coast County, Winter
EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Category	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
	lb/day										lb/day					
Mitigated	0.7127	0.9359	6.9723	0.0133	1.2786	0.0149	1.2935	0.3406	0.0139	0.3545						1,374.1009
Unmitigated	0.7127	0.9359	6.9723	0.0133	1.2786	0.0149	1.2935	0.3406	0.0139	0.3545						1,374.1009

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated Annual VMT	Mitigated Annual VMT
	Weekday	Saturday	Sunday		
General Office Building	0.00	0.00	0.00		
High Turnover (Sit Down Restaurant)	0.00	0.00	0.00		
User Defined Commercial	223.00	227.00	183.00	582,855	582,855
Total	223.00	227.00	183.00	582,855	582,855

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down Restaurant)	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
User Defined Commercial	0.00	7.35	0.00	0.00	100.00	0.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.551001	0.059862	0.185577	0.128146	0.022541	0.005543	0.010825	0.007967	0.000967	0.000632	0.022803	0.000681	0.003455
High Turnover (Sit Down Restaurant)	0.551001	0.059862	0.185577	0.128146	0.022541	0.005543	0.010825	0.007967	0.000967	0.000632	0.022803	0.000681	0.003455
User Defined Commercial	0.551001	0.059862	0.185577	0.128146	0.022541	0.005543	0.010825	0.007967	0.000967	0.000632	0.022803	0.000681	0.003455

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Category	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
	lb/day										lb/day					
NaturalGas Mitigated	0.0199	0.1812	0.1522	1.0900e-003		0.0138	0.0138		0.0138	0.0138						218.7325
NaturalGas Unmitigated	0.0199	0.1812	0.1522	1.0900e-003		0.0138	0.0138		0.0138	0.0138						218.7325

5.2 Energy by Land Use - NaturalGas

Unmitigated

1000 Seward Project (Existing Conditions) - Los Angeles-South Coast County, Winter

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

	Natural Gas 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	lb/day										lb/day						
General Office Building	238.458	2.5700e-003	0.0234	0.0196	1.4000e-004		1.7800e-003	1.7800e-003		1.7800e-003	1.7800e-003							28.2205
High Turnover (Sit Down Restaurant)	1609.79	0.0174	0.1578	0.1326	9.5000e-004		0.0120	0.0120		0.0120	0.0120							190.5120
User Defined Commercial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000							0.0000
Total		0.0199	0.1812	0.1522	1.0900e-003		0.0138	0.0138		0.0138	0.0138							218.7325

Mitigated

	Natural Gas 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	lb/day										lb/day						
General Office Building	0.238458	2.5700e-003	0.0234	0.0196	1.4000e-004		1.7800e-003	1.7800e-003		1.7800e-003	1.7800e-003							28.2205
High Turnover (Sit Down Restaurant)	1.60979	0.0174	0.1578	0.1326	9.5000e-004		0.0120	0.0120		0.0120	0.0120							190.5120
User Defined Commercial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000							0.0000
Total		0.0199	0.1812	0.1522	1.0900e-003		0.0138	0.0138		0.0138	0.0138							218.7325

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	lb/day										lb/day							
Mitigated	0.2457	1.0000e-005	1.2300e-003	0.0000		0.0000	0.0000		0.0000	0.0000							2.8000e-003	
Unmitigated	0.2457	1.0000e-005	1.2300e-003	0.0000		0.0000	0.0000		0.0000	0.0000								2.8000e-003

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	lb/day										lb/day						
Architectural Coating	0.0279					0.0000	0.0000		0.0000	0.0000							0.0000

1000 Seward Project (Existing Conditions) - Los Angeles-South Coast County, Winter

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

Consumer Products	0.2177				0.0000	0.0000		0.0000	0.0000								0.0000
Landscaping	1.2000e-004	1.0000e-005	1.2300e-003	0.0000	0.0000	0.0000		0.0000	0.0000								2.8000e-003
Total	0.2457	1.0000e-005	1.2300e-003	0.0000	0.0000	0.0000		0.0000	0.0000								2.8000e-003

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	lb/day										lb/day						
Architectural Coating	0.0279					0.0000	0.0000		0.0000	0.0000							0.0000
Consumer Products	0.2177					0.0000	0.0000		0.0000	0.0000							0.0000
Landscaping	1.2000e-004	1.0000e-005	1.2300e-003	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000							2.8000e-003
Total	0.2457	1.0000e-005	1.2300e-003	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000							2.8000e-003

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

1000 Seward Project (Existing Conditions) - Los Angeles-South Coast County, Winter
EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

1000 Seward Project (Existing Conditions)
Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	8.44	1000sqft	0.19	8,442.00	0
User Defined Commercial	1.00	User Defined Unit	0.00	0.00	0
High Turnover (Sit Down Restaurant)	2.55	1000sqft	0.06	2,551.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	12			Operational Year	2025
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MWhr)	616	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

- Project Characteristics - Consistency with SB100 RPS for LADWP.
- Land Use - Rest = 2,551 sf
- Construction Phase - Site Specific Schedule
- Off-road Equipment - Site Specific
- Off-road Equipment - Site Specific
- Trips and VMT - Site Specific
- Demolition -
- Grading -
- Vehicle Trips - Site Specific
- Energy Use - Consistency with Section 120.6(c) CBC
- Construction Off-road Equipment Mitigation -
- Mobile Commute Mitigation -
- Energy Mitigation -
- Water Mitigation -
- Waste Mitigation -
- Stationary Sources - Emergency Generators and Fire Pumps -
- Stationary Sources - Emergency Generators and Fire Pumps EF - SCAQMD BACT
- Vehicle Emission Factors -
- Vehicle Emission Factors -
- Vehicle Emission Factors -
- Fleet Mix -

Table Name	Column Name	Default Value	New Value
tblLandUse	LandUseSquareFeet	8,440.00	8,442.00
tblLandUse	LandUseSquareFeet	2,550.00	2,551.00
tblProjectCharacteristics	CO2IntensityFactor	691.98	616
tblVehicleTrips	CC_TL	8.40	7.35
tblVehicleTrips	CC_TTP	0.00	100.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	PR_TP	0.00	100.00
tblVehicleTrips	ST_TR	2.21	0.00

1000 Seward Project (Existing Conditions) - Los Angeles-South Coast County, Winter

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

tblVehicleTrips	ST_TR	122.40	0.00
tblVehicleTrips	ST_TR	0.00	227.00
tblVehicleTrips	SU_TR	0.70	0.00
tblVehicleTrips	SU_TR	142.64	0.00
tblVehicleTrips	SU_TR	0.00	183.00
tblVehicleTrips	WD_TR	9.74	0.00
tblVehicleTrips	WD_TR	112.18	0.00
tblVehicleTrips	WD_TR	0.00	223.00

2.0 Emissions Summary

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	lb/day										lb/day					
Area	0.2457	1.0000e-005	1.2200e-003	0.0000		0.0000	0.0000		0.0000	0.0000						2.7900e-003
Energy	0.0199	0.1812	0.1522	1.0900e-003		0.0138	0.0138		0.0138	0.0138						218.7325
Mobile	0.5732	0.5890	5.3966	0.0114	1.2787	8.5500e-003	1.2873	0.3406	7.9400e-003	0.3486						1,182.1081
Total	0.8388	0.7702	5.5500	0.0125	1.2787	0.0223	1.3010	0.3406	0.0217	0.3623						1,400.8434

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	lb/day										lb/day					
Area	0.2457	1.0000e-005	1.2200e-003	0.0000		0.0000	0.0000		0.0000	0.0000						2.7900e-003
Energy	0.0199	0.1812	0.1522	1.0900e-003		0.0138	0.0138		0.0138	0.0138						218.7325
Mobile	0.5732	0.5890	5.3966	0.0114	1.2787	8.5500e-003	1.2873	0.3406	7.9400e-003	0.3486						1,182.1081
Total	0.8388	0.7702	5.5500	0.0125	1.2787	0.0223	1.3010	0.3406	0.0217	0.3623						1,400.8434

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

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

1000 Seward Project (Existing Conditions) - Los Angeles-South Coast County, Winter

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

Category	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
	lb/day										lb/day					
Mitigated	0.5732	0.5890	5.3966	0.0114	1.2787	8.5500e-003	1.2873	0.3406	7.9400e-003	0.3486						1,182.1081
Unmitigated	0.5732	0.5890	5.3966	0.0114	1.2787	8.5500e-003	1.2873	0.3406	7.9400e-003	0.3486						1,182.1081

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated Annual VMT	Mitigated Annual VMT
	Weekday	Saturday	Sunday		
General Office Building	0.00	0.00	0.00		
High Turnover (Sit Down Restaurant)	0.00	0.00	0.00		
User Defined Commercial	223.00	227.00	183.00	582,855	582,855
Total	223.00	227.00	183.00	582,855	582,855

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down Restaurant)	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
User Defined Commercial	0.00	7.35	0.00	0.00	100.00	0.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.540171	0.064547	0.189075	0.126673	0.023412	0.006384	0.010926	0.008089	0.000929	0.000597	0.025155	0.000706	0.003335
High Turnover (Sit Down Restaurant)	0.540171	0.064547	0.189075	0.126673	0.023412	0.006384	0.010926	0.008089	0.000929	0.000597	0.025155	0.000706	0.003335
User Defined Commercial	0.540171	0.064547	0.189075	0.126673	0.023412	0.006384	0.010926	0.008089	0.000929	0.000597	0.025155	0.000706	0.003335

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Category	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
	lb/day										lb/day					
NaturalGas Mitigated	0.0199	0.1812	0.1522	1.0900e-003		0.0138	0.0138		0.0138	0.0138						218.7325
NaturalGas Unmitigated	0.0199	0.1812	0.1522	1.0900e-003		0.0138	0.0138		0.0138	0.0138						218.7325

5.2 Energy by Land Use - NaturalGas

Unmitigated

1000 Seward Project (Existing Conditions) - Los Angeles-South Coast County, Winter

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

	Natural Gas 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	lb/day										lb/day						
General Office Building	238.458	2.5700e-003	0.0234	0.0196	1.4000e-004		1.7800e-003	1.7800e-003		1.7800e-003	1.7800e-003							28.2205
High Turnover (Sit Down Restaurant)	1609.79	0.0174	0.1578	0.1326	9.5000e-004		0.0120	0.0120		0.0120	0.0120							190.5120
User Defined Commercial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000							0.0000
Total		0.0199	0.1812	0.1522	1.0900e-003		0.0138	0.0138		0.0138	0.0138							218.7325

Mitigated

	Natural Gas 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	lb/day										lb/day						
General Office Building	0.238458	2.5700e-003	0.0234	0.0196	1.4000e-004		1.7800e-003	1.7800e-003		1.7800e-003	1.7800e-003							28.2205
High Turnover (Sit Down Restaurant)	1.60979	0.0174	0.1578	0.1326	9.5000e-004		0.0120	0.0120		0.0120	0.0120							190.5120
User Defined Commercial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000							0.0000
Total		0.0199	0.1812	0.1522	1.0900e-003		0.0138	0.0138		0.0138	0.0138							218.7325

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	lb/day										lb/day					
Mitigated	0.2457	1.0000e-005	1.2200e-003	0.0000		0.0000	0.0000		0.0000	0.0000						2.7900e-003
Unmitigated	0.2457	1.0000e-005	1.2200e-003	0.0000		0.0000	0.0000		0.0000	0.0000						2.7900e-003

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	lb/day										lb/day					
Architectural Coating	0.0279					0.0000	0.0000		0.0000	0.0000						0.0000

1000 Seward Project (Existing Conditions) - Los Angeles-South Coast County, Winter

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

Consumer Products	0.2177				0.0000	0.0000		0.0000	0.0000								0.0000
Landscaping	1.1000e-004	1.0000e-005	1.2200e-003	0.0000	0.0000	0.0000		0.0000	0.0000								2.7900e-003
Total	0.2457	1.0000e-005	1.2200e-003	0.0000	0.0000	0.0000		0.0000	0.0000								2.7900e-003

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	lb/day										lb/day						
Architectural Coating	0.0279					0.0000	0.0000		0.0000	0.0000							0.0000
Consumer Products	0.2177					0.0000	0.0000		0.0000	0.0000							0.0000
Landscaping	1.1000e-004	1.0000e-005	1.2200e-003	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000							2.7900e-003
Total	0.2457	1.0000e-005	1.2200e-003	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000							2.7900e-003

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

1000 Seward Project - Los Angeles-South Coast County, Winter

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

1000 Seward Project
Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	136.20	1000sqft	3.13	136,200.00	0
User Defined Commercial	1.00	User Defined Unit	0.00	0.00	0
Enclosed Parking Structure	310.00	Space	2.79	124,000.00	0
High Turnover (Sit Down Restaurant)	12.20	1000sqft	0.28	12,200.00	0
Strip Mall	2.20	1000sqft	0.05	2,200.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	12			Operational Year	2025
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MWhr)	616	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

- Project Characteristics - Consistency with SB100 RPS for LADWP.
- Land Use -
- Construction Phase - Site Specific Schedule
- Off-road Equipment - Site Specific
- Off-road Equipment - Site Specific
- Off-road Equipment - Site Specific
- Off-road Equipment - Site Specific
- Off-road Equipment - Site Specific
- Off-road Equipment - Site Specific
- Trips and VMT - Site Specific
- Demolition -
- Grading -
- Vehicle Trips - Site Specific
- Vehicle Emission Factors -
- Vehicle Emission Factors -
- Vehicle Emission Factors -
- Energy Use - Consistency with Section 120.6(c) CBC
- Water And Wastewater -
- Solid Waste -
- Construction Off-road Equipment Mitigation -
- Mobile Commute Mitigation -
- Energy Mitigation -
- Water Mitigation -
- Waste Mitigation -
- Fleet Mix -
- Stationary Sources - Emergency Generators and Fire Pumps -
- Stationary Sources - Emergency Generators and Fire Pumps EF - SCAQMD BACT

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	108.00

1000 Seward Project - Los Angeles-South Coast County, Winter

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

tbiConstructionPhase	NumDays	230.00	363.00
tbiConstructionPhase	NumDays	20.00	16.00
tbiConstructionPhase	NumDays	20.00	127.00
tbiConstructionPhase	NumDays	20.00	108.00
tbiConstructionPhase	NumDays	10.00	2.00
tbiGrading	MaterialExported	0.00	55,000.00
tbiOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tbiOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tbiOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tbiOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tbiOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tbiOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tbiOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tbiOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tbiOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tbiOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tbiOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tbiOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tbiOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tbiOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tbiOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tbiOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tbiProjectCharacteristics	CO2IntensityFactor	691.98	616
tbiTripsAndVMT	HaulingTripNumber	50.00	0.00
tbiTripsAndVMT	HaulingTripNumber	6,250.00	0.00
tbiTripsAndVMT	VendorTripLength	6.90	68.00
tbiTripsAndVMT	VendorTripLength	6.90	68.00
tbiTripsAndVMT	VendorTripLength	6.90	13.80
tbiTripsAndVMT	VendorTripLength	6.90	13.80
tbiTripsAndVMT	VendorTripLength	6.90	13.80
tbiTripsAndVMT	VendorTripLength	6.90	13.80
tbiTripsAndVMT	VendorTripNumber	0.00	25.00
tbiTripsAndVMT	VendorTripNumber	0.00	115.00
tbiTripsAndVMT	VendorTripNumber	0.00	180.00
tbiTripsAndVMT	VendorTripNumber	45.00	95.00
tbiTripsAndVMT	VendorTripNumber	0.00	15.00
tbiTripsAndVMT	VendorTripNumber	0.00	15.00
tbiTripsAndVMT	VendorVehicleClass	HDT_Mix	HHDT
tbiTripsAndVMT	VendorVehicleClass	HDT_Mix	HHDT
tbiTripsAndVMT	VendorVehicleClass	HDT_Mix	HHDT
tbiTripsAndVMT	VendorVehicleClass	HDT_Mix	HHDT
tbiTripsAndVMT	WorkerTripNumber	10.00	25.00
tbiTripsAndVMT	WorkerTripNumber	15.00	75.00
tbiTripsAndVMT	WorkerTripNumber	18.00	100.00
tbiTripsAndVMT	WorkerTripNumber	101.00	350.00
tbiTripsAndVMT	WorkerTripNumber	10.00	75.00
tbiVehicleTrips	CC_TL	8.40	7.70
tbiVehicleTrips	CC_TFP	0.00	100.00
tbiVehicleTrips	CNW_TL	6.90	0.00
tbiVehicleTrips	CW_TL	16.60	0.00

1000 Seward Project - Los Angeles-South Coast County, Winter

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

tblVehicleTrips	PR_TP	0.00	100.00
tblVehicleTrips	ST_TR	2.21	0.00
tblVehicleTrips	ST_TR	122.40	0.00
tblVehicleTrips	ST_TR	42.04	0.00
tblVehicleTrips	ST_TR	0.00	1,148.00
tblVehicleTrips	SU_TR	0.70	0.00
tblVehicleTrips	SU_TR	142.64	0.00
tblVehicleTrips	SU_TR	20.43	0.00
tblVehicleTrips	SU_TR	0.00	876.00
tblVehicleTrips	WD_TR	9.74	0.00
tblVehicleTrips	WD_TR	112.18	0.00
tblVehicleTrips	WD_TR	44.32	0.00
tblVehicleTrips	WD_TR	0.00	1,542.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

Year	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
	lb/day										lb/day					
2022	3.3344	79.7904	24.9401	0.2765	8.2556	1.1006	9.3562	2.1613	1.0311	3.1924						
2023	3.6511	63.0749	37.0264	0.2624	8.2558	1.2683	9.1307	2.1613	1.2441	2.9788						
2024	16.9973	29.7024	41.7851	0.1284	6.5057	0.8517	7.3574	1.7443	0.8179	2.5623						
Maximum	16.9973	79.7904	41.7851	0.2765	8.2558	1.2683	9.3562	2.1613	1.2441	3.1924						

Mitigated Construction

Year	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
	lb/day										lb/day					
2022	3.3344	79.7904	24.9401	0.2765	7.9023	1.1006	9.0029	2.1218	1.0311	3.1529						
2023	3.6511	63.0749	37.0264	0.2624	7.9025	1.2683	8.7774	2.1219	1.2441	2.9393						
2024	16.9973	29.7024	41.7851	0.1284	6.5057	0.8517	7.3574	1.7443	0.8179	2.5623						
Maximum	16.9973	79.7904	41.7851	0.2765	7.9025	1.2683	9.0029	2.1219	1.2441	3.1529						

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	3.07	0.00	2.73	1.30	0.00	0.90	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational

1000 Seward Project - Los Angeles-South Coast County, Winter

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

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	lb/day										lb/day					
Area	3.4221	4.3000e-004	0.0470	0.0000		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004						
Energy	0.1246	1.1329	0.9517	6.8000e-003		0.0861	0.0861		0.0861	0.0861						
Mobile	3.9861	4.1463	38.0289	0.0811	9.0999	0.0606	9.1605	2.4241	0.0563	2.4803						
Stationary	0.2051	0.5733	0.5231	9.9000e-004		0.0302	0.0302		0.0302	0.0302						
Total	7.7380	5.8530	39.5506	0.0889	9.0999	0.1771	9.2770	2.4241	0.1727	2.5968						

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	lb/day										lb/day					
Area	3.4221	4.3000e-004	0.0470	0.0000		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004						
Energy	0.1246	1.1329	0.9517	6.8000e-003		0.0861	0.0861		0.0861	0.0861						
Mobile	3.9861	4.1463	38.0289	0.0811	9.0999	0.0606	9.1605	2.4241	0.0563	2.4803						
Stationary	0.2051	0.5733	0.5231	9.9000e-004		0.0302	0.0302		0.0302	0.0302						
Total	7.7380	5.8530	39.5506	0.0889	9.0999	0.1771	9.2770	2.4241	0.1727	2.5968						

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2022	9/22/2022	5	16	
2	Grading	Grading	9/23/2022	3/20/2023	5	127	
3	Mat Foundation	Site Preparation	4/1/2023	4/4/2023	5	2	
4	Building Construction	Building Construction	4/11/2023	8/29/2024	5	363	
5	Paving	Paving	4/1/2024	8/28/2024	5	108	
6	Architectural Coating	Architectural Coating	4/1/2024	8/28/2024	5	108	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 63.5

Acres of Paving: 2.79

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 225,900; Non-Residential Outdoor: 75,300; Striped Parking Area: 7,440 (Architectural

1000 Seward Project - Los Angeles-South Coast County, Winter

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Excavators	1	8.00	158	0.38
Demolition	Rubber Tired Dozers	0	8.00	247	0.40
Demolition	Rubber Tired Loaders	2	8.00	203	0.36
Demolition	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Bore/Drill Rigs	1	8.00	221	0.50
Grading	Cranes	1	8.00	231	0.29
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Plate Compactors	1	8.00	8	0.43
Grading	Rubber Tired Dozers	0	8.00	247	0.40
Grading	Rubber Tired Loaders	1	8.00	203	0.36
Grading	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Mat Foundation	Cranes	1	12.00	231	0.29
Mat Foundation	Pumps	4	12.00	84	0.74
Mat Foundation	Rubber Tired Dozers	0	8.00	247	0.40
Mat Foundation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Mat Foundation	Welders	2	8.00	46	0.45
Building Construction	Aerial Lifts	2	8.00	63	0.31
Building Construction	Air Compressors	2	8.00	78	0.48
Building Construction	Cranes	0	7.00	231	0.29
Building Construction	Forklifts	2	8.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Plate Compactors	1	8.00	8	0.43
Building Construction	Pumps	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Welders	2	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	0	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	8.00	80	0.38
Paving	Skid Steer Loaders	1	8.00	65	0.37
Architectural Coating	Air Compressors	0	6.00	78	0.48

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	25.00	25.00	0.00	14.70	68.00	20.00	LD_Mix	HHDT	HHDT
Grading	6	75.00	115.00	0.00	14.70	68.00	20.00	LD_Mix	HHDT	HHDT
Mat Foundation	7	100.00	180.00	0.00	14.70	13.80	20.00	LD_Mix	HHDT	HHDT
Building Construction	11	350.00	95.00	0.00	14.70	13.80	20.00	LD_Mix	HHDT	HHDT
Paving	4	75.00	15.00	0.00	14.70	13.80	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	0	20.00	15.00	0.00	14.70	13.80	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 2022

1000 Seward Project - Los Angeles-South Coast County, Winter

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

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	lb/day										lb/day					
Fugitive Dust					0.6767	0.0000	0.6767	0.1025	0.0000	0.1025						
Off-Road	0.9499	9.5026	8.5555	0.0208		0.3790	0.3790		0.3487	0.3487						
Total	0.9499	9.5026	8.5555	0.0208	0.6767	0.3790	1.0557	0.1025	0.3487	0.4511						

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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.3284	13.6564	2.5169	0.0512	1.4865	0.1053	1.5918	0.4075	0.1007	0.5082						
Worker	0.0926	0.0698	0.9034	2.4200e-003	0.2794	1.7900e-003	0.2812	0.0741	1.6500e-003	0.0758						
Total	0.4210	13.7262	3.4203	0.0536	1.7660	0.1071	1.8731	0.4816	0.1024	0.5840						

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	lb/day										lb/day					
Fugitive Dust					0.2639	0.0000	0.2639	0.0400	0.0000	0.0400						
Off-Road	0.9499	9.5026	8.5555	0.0208		0.3790	0.3790		0.3487	0.3487						
Total	0.9499	9.5026	8.5555	0.0208	0.2639	0.3790	0.6429	0.0400	0.3487	0.3886						

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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.3284	13.6564	2.5169	0.0512	1.4865	0.1053	1.5918	0.4075	0.1007	0.5082						

1000 Seward Project - Los Angeles-South Coast County, Winter

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

Worker	0.0926	0.0698	0.9034	2.4200e-003	0.2794	1.7900e-003	0.2812	0.0741	1.6500e-003	0.0758						
Total	0.4210	13.7262	3.4203	0.0536	1.7660	0.1071	1.8731	0.4816	0.1024	0.5840						

3.3 Grading - 2022

Unmitigated Construction On-Site

Category	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
Fugitive Dust					0.5792	0.0000	0.5792	0.0647	0.0000	0.0647						
Off-Road	1.5460	16.7615	10.6521	0.0337		0.6108	0.6108		0.5628	0.5628						
Total	1.5460	16.7615	10.6521	0.0337	0.5792	0.6108	1.1901	0.0647	0.5628	0.6274						

Unmitigated Construction Off-Site

Category	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
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	1.5106	62.8195	11.5778	0.2355	6.8381	0.4844	7.3224	1.8743	0.4634	2.3377						
Worker	0.2778	0.2093	2.7103	7.2600e-003	0.8383	5.3600e-003	0.8437	0.2223	4.9400e-003	0.2273						
Total	1.7884	63.0288	14.2881	0.2428	7.6764	0.4897	8.1661	2.0966	0.4684	2.5650						

Mitigated Construction On-Site

Category	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
Fugitive Dust					0.2259	0.0000	0.2259	0.0252	0.0000	0.0252						
Off-Road	1.5460	16.7615	10.6521	0.0337		0.6108	0.6108		0.5628	0.5628						
Total	1.5460	16.7615	10.6521	0.0337	0.2259	0.6108	0.8367	0.0252	0.5628	0.5880						

Mitigated Construction Off-Site

1000 Seward Project - Los Angeles-South Coast County, Winter

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	1.5106	62.8195	11.5778	0.2355	6.8381	0.4844	7.3224	1.8743	0.4634	2.3377						
Worker	0.2778	0.2093	2.7103	7.2600e-003	0.8383	5.3600e-003	0.8437	0.2223	4.9400e-003	0.2273						
Total	1.7884	63.0288	14.2881	0.2428	7.6764	0.4897	8.1661	2.0966	0.4684	2.5650						

3.3 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5792	0.0000	0.5792	0.0647	0.0000	0.0647						
Off-Road	1.4493	14.9627	10.5379	0.0338		0.5506	0.5506		0.5073	0.5073						
Total	1.4493	14.9627	10.5379	0.0338	0.5792	0.5506	1.1298	0.0647	0.5073	0.5720						

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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.5343	47.9273	9.5504	0.2216	6.8383	0.3193	7.1575	1.8743	0.3055	2.1798						
Worker	0.2579	0.1848	2.4914	7.0300e-003	0.8383	5.0400e-003	0.8434	0.2223	4.6400e-003	0.2270						
Total	0.7922	48.1121	12.0418	0.2286	7.6766	0.3243	8.0009	2.0967	0.3101	2.4068						

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	lb/day										lb/day					
Fugitive Dust					0.2259	0.0000	0.2259	0.0252	0.0000	0.0252						
Off-Road	1.4493	14.9627	10.5379	0.0338		0.5506	0.5506		0.5073	0.5073						
Total	1.4493	14.9627	10.5379	0.0338	0.2259	0.5506	0.7765	0.0252	0.5073	0.5326						

1000 Seward Project - Los Angeles-South Coast County, Winter

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

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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.5343	47.9273	9.5504	0.2216	6.8383	0.3193	7.1575	1.8743	0.3055	2.1798						
Worker	0.2579	0.1848	2.4914	7.0300e-003	0.8383	5.0400e-003	0.8434	0.2223	4.6400e-003	0.2270						
Total	0.7922	48.1121	12.0418	0.2286	7.6766	0.3243	8.0009	2.0967	0.3101	2.4068						

3.4 Mat Foundation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Off-Road	3.0028	25.0815	28.4592	0.0532		1.1583	1.1583		1.1392	1.1392						
Total	3.0028	25.0815	28.4592	0.0532	0.0000	1.1583	1.1583	0.0000	1.1392	1.1392						

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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.3044	18.0016	5.2454	0.0742	2.1752	0.1032	2.2784	0.5965	0.0987	0.6952						
Worker	0.3438	0.2464	3.3219	9.3700e-003	1.1178	6.7200e-003	1.1245	0.2964	6.1900e-003	0.3026						
Total	0.6482	18.2481	8.5672	0.0836	3.2930	0.1099	3.4029	0.8929	0.1049	0.9978						

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	lb/day										lb/day					

1000 Seward Project - Los Angeles-South Coast County, Winter

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

Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Off-Road	3.0028	25.0815	28.4592	0.0532		1.1583	1.1583		1.1392	1.1392						
Total	3.0028	25.0815	28.4592	0.0532	0.0000	1.1583	1.1583	0.0000	1.1392	1.1392						

Mitigated Construction Off-Site

Category	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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.3044	18.0016	5.2454	0.0742	2.1752	0.1032	2.2784	0.5965	0.0987	0.6952						
Worker	0.3438	0.2464	3.3219	9.3700e-003	1.1178	6.7200e-003	1.1245	0.2964	6.1900e-003	0.3026						
Total	0.6482	18.2481	8.5672	0.0836	3.2930	0.1099	3.4029	0.8929	0.1049	0.9978						

3.5 Building Construction - 2023

Unmitigated Construction On-Site

Category	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	lb/day										lb/day					
Off-Road	1.7947	13.6495	18.5473	0.0292		0.6471	0.6471		0.6308	0.6308						
Total	1.7947	13.6495	18.5473	0.0292		0.6471	0.6471		0.6308	0.6308						

Unmitigated Construction Off-Site

Category	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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.1606	9.5009	2.7684	0.0392	1.1480	0.0545	1.2025	0.3148	0.0521	0.3669						
Worker	1.2034	0.8625	11.6265	0.0328	3.9122	0.0235	3.9357	1.0375	0.0217	1.0592						
Total	1.3641	10.3634	14.3949	0.0720	5.0602	0.0780	5.1382	1.3523	0.0738	1.4261						

1000 Seward Project - Los Angeles-South Coast County, Winter

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

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	lb/day										lb/day					
Off-Road	1.7947	13.6495	18.5473	0.0292		0.6471	0.6471		0.6308	0.6308						
Total	1.7947	13.6495	18.5473	0.0292		0.6471	0.6471		0.6308	0.6308						

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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.1606	9.5009	2.7684	0.0392	1.1480	0.0545	1.2025	0.3148	0.0521	0.3669						
Worker	1.2034	0.8625	11.6265	0.0328	3.9122	0.0235	3.9357	1.0375	0.0217	1.0592						
Total	1.3641	10.3634	14.3949	0.0720	5.0602	0.0780	5.1382	1.3523	0.0738	1.4261						

3.5 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6833	12.9283	18.5050	0.0292		0.5629	0.5629		0.5486	0.5486						
Total	1.6833	12.9283	18.5050	0.0292		0.5629	0.5629		0.5486	0.5486						

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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.1596	9.5216	2.8081	0.0386	1.1481	0.0549	1.2029	0.3148	0.0525	0.3673						
Worker	1.1249	0.7697	10.8133	0.0319	3.9122	0.0225	3.9347	1.0375	0.0207	1.0583						
Total	1.2846	10.2913	13.6213	0.0704	5.0602	0.0774	5.1376	1.3524	0.0732	1.4256						

1000 Seward Project - Los Angeles-South Coast County, Winter

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

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	lb/day										lb/day					
Off-Road	1.6833	12.9283	18.5050	0.0292		0.5629	0.5629		0.5486	0.5486						
Total	1.6833	12.9283	18.5050	0.0292		0.5629	0.5629		0.5486	0.5486						

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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.1996	9.5216	2.8081	0.0386	1.1481	0.0549	1.2029	0.3146	0.0525	0.3673						
Worker	1.1249	0.7697	10.8133	0.0319	3.9122	0.0225	3.9347	1.0375	0.0207	1.0583						
Total	1.2846	10.2913	13.6213	0.0704	5.0602	0.0774	5.1376	1.3524	0.0732	1.4256						

3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4315	4.2151	6.1128	9.4800e-003		0.1938	0.1938		0.1794	0.1794						
Paving	0.0000					0.0000	0.0000		0.0000	0.0000						
Total	0.4315	4.2151	6.1128	9.4800e-003		0.1938	0.1938		0.1794	0.1794						

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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						

1000 Seward Project - Los Angeles-South Coast County, Winter

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

Vendor	0.0234	1.0295	0.3055	5.2800e-003	0.1918	5.7500e-003	0.1975	0.0552	5.5000e-003	0.0607						
Worker	0.2411	0.1649	2.3171	6.8300e-003	0.8383	4.8300e-003	0.8432	0.2223	4.4400e-003	0.2268						
Total	0.2644	1.1944	2.6226	0.0121	1.0301	0.0106	1.0407	0.2775	9.9400e-003	0.2875						

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	lb/day										lb/day					
Off-Road	0.4315	4.2151	6.1128	9.4800e-003		0.1938	0.1938		0.1794	0.1794						
Paving	0.0000					0.0000	0.0000		0.0000	0.0000						
Total	0.4315	4.2151	6.1128	9.4800e-003		0.1938	0.1938		0.1794	0.1794						

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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0234	1.0295	0.3055	5.2800e-003	0.1918	5.7500e-003	0.1975	0.0552	5.5000e-003	0.0607						
Worker	0.2411	0.1649	2.3171	6.8300e-003	0.8383	4.8300e-003	0.8432	0.2223	4.4400e-003	0.2268						
Total	0.2644	1.1944	2.6226	0.0121	1.0301	0.0106	1.0407	0.2775	9.9400e-003	0.2875						

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	13.2458					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						
Total	13.2458	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						

Unmitigated Construction Off-Site

1000 Seward Project - Los Angeles-South Coast County, Winter

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0234	1.0295	0.3055	5.2800e-003	0.1918	5.7500e-003	0.1975	0.0552	5.5000e-003	0.0607						
Worker	0.0643	0.0440	0.6179	1.8200e-003	0.2236	1.2900e-003	0.2248	0.0593	1.1900e-003	0.0605						
Total	0.0877	1.0734	0.9234	7.1000e-003	0.4153	7.0400e-003	0.4224	0.1145	6.6900e-003	0.1212						

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	lb/day										lb/day					
Archit. Coating	13.2458					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						
Total	13.2458	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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0234	1.0295	0.3055	5.2800e-003	0.1918	5.7500e-003	0.1975	0.0552	5.5000e-003	0.0607						
Worker	0.0643	0.0440	0.6179	1.8200e-003	0.2236	1.2900e-003	0.2248	0.0593	1.1900e-003	0.0605						
Total	0.0877	1.0734	0.9234	7.1000e-003	0.4153	7.0400e-003	0.4224	0.1145	6.6900e-003	0.1212						

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
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1000 Seward Project - Los Angeles-South Coast County, Winter

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

Category	lb/day										lb/day									
Mitigated	3.9861	4.1463	38.0289	0.0811	9.0999	0.0606	9.1605	2.4241	0.0563	2.4803										
Unmitigated	3.9861	4.1463	38.0289	0.0811	9.0999	0.0606	9.1605	2.4241	0.0563	2.4803										

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated Annual VMT	Mitigated Annual VMT
	Weekday	Saturday	Sunday		
Enclosed Parking Structure	0.00	0.00	0.00		
General Office Building	0.00	0.00	0.00		
High Turnover (Sit Down Restaurant)	0.00	0.00	0.00		
Strip Mall	0.00	0.00	0.00		
User Defined Commercial	1,542.00	1,148.00	876.00	3,897,494	3,897,494
Total	1,542.00	1,148.00	876.00	3,897,494	3,897,494

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Enclosed Parking Structure	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down Restaurant)	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Strip Mall	16.60	8.40	6.90	16.60	64.40	19.00	45	40	15
User Defined Commercial	0.00	7.70	0.00	0.00	100.00	0.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Enclosed Parking Structure	0.540171	0.064547	0.189075	0.126673	0.023412	0.006384	0.010926	0.008089	0.000929	0.000597	0.025155	0.000706	0.003335
General Office Building	0.540171	0.064547	0.189075	0.126673	0.023412	0.006384	0.010926	0.008089	0.000929	0.000597	0.025155	0.000706	0.003335
High Turnover (Sit Down Restaurant)	0.540171	0.064547	0.189075	0.126673	0.023412	0.006384	0.010926	0.008089	0.000929	0.000597	0.025155	0.000706	0.003335
Strip Mall	0.540171	0.064547	0.189075	0.126673	0.023412	0.006384	0.010926	0.008089	0.000929	0.000597	0.025155	0.000706	0.003335
User Defined Commercial	0.540171	0.064547	0.189075	0.126673	0.023412	0.006384	0.010926	0.008089	0.000929	0.000597	0.025155	0.000706	0.003335

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Install High Efficiency Lighting

Category	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
	lb/day										lb/day					
NaturalGas Mitigated	0.1246	1.1329	0.9517	6.8000e-003		0.0861	0.0861		0.0861	0.0861						
NaturalGas Unmitigated	0.1246	1.1329	0.9517	6.8000e-003		0.0861	0.0861		0.0861	0.0861						

5.2 Energy by Land Use - NaturalGas

Unmitigated

1000 Seward Project - Los Angeles-South Coast County, Winter

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

	Natural Gas 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	lb/day										lb/day					
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
General Office Building	3847.18	0.0415	0.3772	0.3168	2.2600e-003		0.0287	0.0287		0.0287	0.0287						
High Turnover (Sit Down Restaurant)	7698.7	0.0830	0.7548	0.6340	4.5300e-003		0.0574	0.0574		0.0574	0.0574						
Strip Mall	9.82466	1.1000e-004	9.6000e-004	8.1000e-004	1.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005						
User Defined Commercial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Total		0.1246	1.1329	0.9517	6.8000e-003		0.0861	0.0861		0.0861	0.0861						

Mitigated

	Natural Gas 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	lb/day										lb/day					
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
General Office Building	3.84718	0.0415	0.3772	0.3168	2.2600e-003		0.0287	0.0287		0.0287	0.0287						
High Turnover (Sit Down Restaurant)	7.6987	0.0830	0.7548	0.6340	4.5300e-003		0.0574	0.0574		0.0574	0.0574						
Strip Mall	0.00982466	1.1000e-004	9.6000e-004	8.1000e-004	1.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005						
User Defined Commercial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Total		0.1246	1.1329	0.9517	6.8000e-003		0.0861	0.0861		0.0861	0.0861						

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	lb/day										lb/day					
Mitigated	3.4221	4.3000e-004	0.0470	0.0000		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004						
Unmitigated	3.4221	4.3000e-004	0.0470	0.0000		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004						

6.2 Area by SubCategory

Unmitigated

1000 Seward Project - Los Angeles-South Coast County, Winter

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.3919					0.0000	0.0000		0.0000	0.0000						
Consumer Products	3.0258					0.0000	0.0000		0.0000	0.0000						
Landscaping	4.3300e-003	4.3000e-004	0.0470	0.0000		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004						
Total	3.4221	4.3000e-004	0.0470	0.0000		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004						

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	lb/day										lb/day					
Architectural Coating	0.3919					0.0000	0.0000		0.0000	0.0000						
Consumer Products	3.0258					0.0000	0.0000		0.0000	0.0000						
Landscaping	4.3300e-003	4.3000e-004	0.0470	0.0000		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004						
Total	3.4221	4.3000e-004	0.0470	0.0000		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004						

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	1	0.25	10	500	0.73	Diesel

Boilers

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

Equipment Type	Number
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1000 Seward Project - Los Angeles-South Coast County, Winter

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

10.1 Stationary Sources

Unmitigated/Mitigated

Equipment Type	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
	lb/day										lb/day					
Emergency	0.2051	0.5733	0.5231	9.9000e-004		0.0302	0.0302		0.0302	0.0302						
Total	0.2051	0.5733	0.5231	9.9000e-004		0.0302	0.0302		0.0302	0.0302						

11.0 Vegetation

1000 Seward Project - Los Angeles-South Coast County, Winter

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

1000 Seward Project
Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	136.20	1000sqft	3.13	136,200.00	0
User Defined Commercial	1.00	User Defined Unit	0.00	0.00	0
Enclosed Parking Structure	310.00	Space	2.79	124,000.00	0
High Turnover (Sit Down Restaurant)	12.20	1000sqft	0.28	12,200.00	0
Strip Mall	2.20	1000sqft	0.05	2,200.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	12			Operational Year	2025
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MWhr)	616	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

- Project Characteristics - Consistency with SB100 RPS for LADWP.
- Land Use -
- Construction Phase - Site Specific Schedule
- Off-road Equipment - Site Specific
- Off-road Equipment - Site Specific
- Off-road Equipment - Site Specific
- Off-road Equipment - Site Specific
- Off-road Equipment - Site Specific
- Off-road Equipment - Site Specific
- Trips and VMT - Site Specific
- Demolition -
- Grading -
- Vehicle Trips - Site Specific
- Vehicle Emission Factors -
- Vehicle Emission Factors -
- Vehicle Emission Factors -
- Energy Use - Consistency with Section 120.6(c) CBC
- Water And Wastewater -
- Solid Waste -
- Construction Off-road Equipment Mitigation -
- Mobile Commute Mitigation -
- Energy Mitigation -
- Water Mitigation -
- Waste Mitigation -
- Fleet Mix -
- Stationary Sources - Emergency Generators and Fire Pumps -
- Stationary Sources - Emergency Generators and Fire Pumps EF - SCAQMD BACT

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	16.00

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

tbiConstructionPhase	NumDays	20.00	127.00
tbiConstructionPhase	NumDays	10.00	2.00
tbiConstructionPhase	NumDays	230.00	363.00
tbiConstructionPhase	NumDays	20.00	108.00
tbiConstructionPhase	NumDays	20.00	108.00
tbiGrading	MaterialExported	0.00	55,000.00
tbiOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tbiOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tbiOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tbiOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tbiOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tbiOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tbiOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tbiOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tbiOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tbiOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tbiOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tbiOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tbiOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tbiOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tbiOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tbiOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tbiProjectCharacteristics	CO2IntensityFactor	691.98	616
tbiTripsAndVMT	HaulingTripNumber	50.00	0.00
tbiTripsAndVMT	HaulingTripNumber	6,250.00	0.00
tbiTripsAndVMT	VendorTripLength	6.90	68.00
tbiTripsAndVMT	VendorTripLength	6.90	68.00
tbiTripsAndVMT	VendorTripLength	6.90	13.80
tbiTripsAndVMT	VendorTripLength	6.90	13.80
tbiTripsAndVMT	VendorTripLength	6.90	13.80
tbiTripsAndVMT	VendorTripLength	6.90	13.80
tbiTripsAndVMT	VendorTripNumber	45.00	0.00
tbiTripsAndVMT	VendorVehicleClass	HDT_Mix	HHDT
tbiTripsAndVMT	VendorVehicleClass	HDT_Mix	HHDT
tbiTripsAndVMT	VendorVehicleClass	HDT_Mix	HHDT
tbiTripsAndVMT	VendorVehicleClass	HDT_Mix	HHDT
tbiTripsAndVMT	WorkerTripNumber	10.00	0.00
tbiTripsAndVMT	WorkerTripNumber	15.00	0.00
tbiTripsAndVMT	WorkerTripNumber	18.00	0.00
tbiTripsAndVMT	WorkerTripNumber	101.00	0.00
tbiTripsAndVMT	WorkerTripNumber	10.00	0.00
tbiTripsAndVMT	WorkerTripNumber	20.00	0.00
tbiVehicleTrips	CC_TL	8.40	7.70
tbiVehicleTrips	CC_TTP	0.00	100.00
tbiVehicleTrips	CNW_TL	6.90	0.00
tbiVehicleTrips	CW_TL	16.60	0.00
tbiVehicleTrips	PR_TP	0.00	100.00
tbiVehicleTrips	ST_TR	2.21	0.00
tbiVehicleTrips	ST_TR	122.40	0.00
tbiVehicleTrips	ST_TR	42.04	0.00

1000 Seward Project - Los Angeles-South Coast County, Winter

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

tblVehicleTrips	SU_TR	0.00	1,148.00
tblVehicleTrips	SU_TR	0.70	0.00
tblVehicleTrips	SU_TR	142.64	0.00
tblVehicleTrips	SU_TR	20.43	0.00
tblVehicleTrips	SU_TR	0.00	876.00
tblVehicleTrips	WD_TR	9.74	0.00
tblVehicleTrips	WD_TR	112.18	0.00
tblVehicleTrips	WD_TR	44.32	0.00
tblVehicleTrips	WD_TR	0.00	1,542.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

Year	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
	lb/day										lb/day					
2022	1.5460	16.7615	10.6521	0.0337	0.6767	0.6108	1.1901	0.1025	0.5628	0.6274						
2023	3.0028	25.0815	28.4592	0.0532	0.5792	1.1583	1.1583	0.0647	1.1392	1.1392						
2024	15.3606	17.1434	24.6178	0.0387	0.0000	0.7567	0.7567	0.0000	0.7281	0.7281						
Maximum	15.3606	25.0815	28.4592	0.0532	0.6767	1.1583	1.1901	0.1025	1.1392	1.1392						

Mitigated Construction

Year	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
	lb/day										lb/day					
2022	1.5460	16.7615	10.6521	0.0337	0.2639	0.6108	0.8367	0.0400	0.5628	0.5880						
2023	3.0028	25.0815	28.4592	0.0532	0.2259	1.1583	1.1583	0.0252	1.1392	1.1392						
2024	15.3606	17.1434	24.6178	0.0387	0.0000	0.7567	0.7567	0.0000	0.7281	0.7281						
Maximum	15.3606	25.0815	28.4592	0.0532	0.2639	1.1583	1.1583	0.0400	1.1392	1.1392						

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	61.00	0.00	11.38	61.00	0.00	1.58	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

1000 Seward Project - Los Angeles-South Coast County, Winter

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

1	Demolition	Demolition	9/1/2022	9/22/2022	5	16
2	Grading	Grading	9/23/2022	3/20/2023	5	127
3	Mat Foundation	Site Preparation	4/1/2023	4/4/2023	5	2
4	Building Construction	Building Construction	4/11/2023	8/29/2024	5	363
5	Paving	Paving	4/1/2024	8/28/2024	5	108
6	Architectural Coating	Architectural Coating	4/1/2024	8/28/2024	5	108

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 63.5

Acres of Paving: 2.79

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 225,900; Non-Residential Outdoor: 75,300; Striped Parking Area: 7,440 (Architectural

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Excavators	1	8.00	158	0.38
Demolition	Rubber Tired Dozers	0	8.00	247	0.40
Demolition	Rubber Tired Loaders	2	8.00	203	0.36
Demolition	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Bore/Drill Rigs	1	8.00	221	0.50
Grading	Cranes	1	8.00	231	0.29
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Plate Compactors	1	8.00	8	0.43
Grading	Rubber Tired Dozers	0	8.00	247	0.40
Grading	Rubber Tired Loaders	1	8.00	203	0.36
Grading	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Mat Foundation	Cranes	1	12.00	231	0.29
Mat Foundation	Pumps	4	12.00	84	0.74
Mat Foundation	Rubber Tired Dozers	0	8.00	247	0.40
Mat Foundation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Mat Foundation	Welders	2	8.00	46	0.45
Building Construction	Aerial Lifts	2	8.00	63	0.31
Building Construction	Air Compressors	2	8.00	78	0.48
Building Construction	Cranes	0	7.00	231	0.29
Building Construction	Forklifts	2	8.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Plate Compactors	1	8.00	8	0.43
Building Construction	Pumps	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Welders	2	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	0	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	8.00	80	0.38
Paving	Skid Steer Loaders	1	8.00	65	0.37
Architectural Coating	Air Compressors	0	6.00	78	0.48

Trips and VMT

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

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	0.00	0.00	0.00	14.70	68.00	20.00	LD_Mix	HHDT	HHDT
Grading	6	0.00	0.00	0.00	14.70	68.00	20.00	LD_Mix	HHDT	HHDT
Mat Foundation	7	0.00	0.00	0.00	14.70	13.80	20.00	LD_Mix	HHDT	HHDT
Building Construction	11	0.00	0.00	0.00	14.70	13.80	20.00	LD_Mix	HHDT	HHDT
Paving	4	0.00	0.00	0.00	14.70	13.80	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	0	0.00	0.00	0.00	14.70	13.80	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.6767	0.0000	0.6767	0.1025	0.0000	0.1025						
Off-Road	0.9499	9.5026	8.5555	0.0208		0.3790	0.3790		0.3487	0.3487						
Total	0.9499	9.5026	8.5555	0.0208	0.6767	0.3790	1.0557	0.1025	0.3487	0.4511						

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	lb/day										lb/day					
Hauling	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						
Worker	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						

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	lb/day										lb/day					
Fugitive Dust					0.2639	0.0000	0.2639	0.0400	0.0000	0.0400						
Off-Road	0.9499	9.5026	8.5555	0.0208		0.3790	0.3790		0.3487	0.3487						

1000 Seward Project - Los Angeles-South Coast County, Winter

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

Total	0.9499	9.5026	8.5555	0.0208	0.2639	0.3790	0.6429	0.0400	0.3487	0.3886						
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Mitigated Construction Off-Site

Category	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
	lb/day										lb/day					
Hauling	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						
Worker	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						

3.3 Grading - 2022

Unmitigated Construction On-Site

Category	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
	lb/day										lb/day					
Fugitive Dust					0.5792	0.0000	0.5792	0.0647	0.0000	0.0647						
Off-Road	1.5460	16.7615	10.6521	0.0337		0.6108	0.6108		0.5628	0.5628						
Total	1.5460	16.7615	10.6521	0.0337	0.5792	0.6108	1.1901	0.0647	0.5628	0.6274						

Unmitigated Construction Off-Site

Category	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
	lb/day										lb/day					
Hauling	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						
Worker	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						

Mitigated Construction On-Site

1000 Seward Project - Los Angeles-South Coast County, Winter

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.2259	0.0000	0.2259	0.0252	0.0000	0.0252						
Off-Road	1.5460	16.7615	10.6521	0.0337		0.6108	0.6108		0.5628	0.5628						
Total	1.5460	16.7615	10.6521	0.0337	0.2259	0.6108	0.8367	0.0252	0.5628	0.5880						

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	lb/day										lb/day					
Hauling	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						
Worker	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						

3.3 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5792	0.0000	0.5792	0.0647	0.0000	0.0647						
Off-Road	1.4493	14.9627	10.5379	0.0338		0.5506	0.5506		0.5073	0.5073						
Total	1.4493	14.9627	10.5379	0.0338	0.5792	0.5506	1.1298	0.0647	0.5073	0.5720						

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	lb/day										lb/day					
Hauling	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						
Worker	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						

1000 Seward Project - Los Angeles-South Coast County, Winter

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

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	lb/day										lb/day					
Fugitive Dust					0.2259	0.0000	0.2259	0.0252	0.0000	0.0252						
Off-Road	1.4493	14.9627	10.5379	0.0338		0.5506	0.5506		0.5073	0.5073						
Total	1.4493	14.9627	10.5379	0.0338	0.2259	0.5506	0.7765	0.0252	0.5073	0.5326						

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	lb/day										lb/day					
Hauling	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						
Worker	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						

3.4 Mat Foundation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Off-Road	3.0028	25.0815	28.4592	0.0532		1.1583	1.1583		1.1392	1.1392						
Total	3.0028	25.0815	28.4592	0.0532	0.0000	1.1583	1.1583	0.0000	1.1392	1.1392						

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	lb/day										lb/day					

1000 Seward Project - Los Angeles-South Coast County, Winter

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

Hauling	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						
Worker	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						

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	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Off-Road	3.0028	25.0815	28.4592	0.0532		1.1583	1.1583		1.1392	1.1392						
Total	3.0028	25.0815	28.4592	0.0532	0.0000	1.1583	1.1583	0.0000	1.1392	1.1392						

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	lb/day										lb/day					
Hauling	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						
Worker	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						

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7947	13.6495	18.5473	0.0292		0.6471	0.6471		0.6308	0.6308						
Total	1.7947	13.6495	18.5473	0.0292		0.6471	0.6471		0.6308	0.6308						

Unmitigated Construction Off-Site

1000 Seward Project - Los Angeles-South Coast County, Winter

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	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						
Worker	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						

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	lb/day										lb/day					
Off-Road	1.7947	13.6495	18.5473	0.0292		0.6471	0.6471		0.6308	0.6308						
Total	1.7947	13.6495	18.5473	0.0292		0.6471	0.6471		0.6308	0.6308						

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	lb/day										lb/day					
Hauling	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						
Worker	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						

3.5 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6833	12.9283	18.5050	0.0292		0.5629	0.5629		0.5486	0.5486						
Total	1.6833	12.9283	18.5050	0.0292		0.5629	0.5629		0.5486	0.5486						

1000 Seward Project - Los Angeles-South Coast County, Winter

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

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	lb/day										lb/day					
Hauling	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						
Worker	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						

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	lb/day										lb/day					
Off-Road	1.6833	12.9283	18.5050	0.0292		0.5629	0.5629		0.5486	0.5486						
Total	1.6833	12.9283	18.5050	0.0292		0.5629	0.5629		0.5486	0.5486						

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	lb/day										lb/day					
Hauling	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						
Worker	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						

3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

1000 Seward Project - Los Angeles-South Coast County, Winter

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

Off-Road	0.4315	4.2151	6.1128	9.4800e-003		0.1938	0.1938		0.1794	0.1794						
Paving	0.0000					0.0000	0.0000		0.0000	0.0000						
Total	0.4315	4.2151	6.1128	9.4800e-003		0.1938	0.1938		0.1794	0.1794						

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	lb/day										lb/day					
Hauling	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						
Worker	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						

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	lb/day										lb/day					
Off-Road	0.4315	4.2151	6.1128	9.4800e-003		0.1938	0.1938		0.1794	0.1794						
Paving	0.0000					0.0000	0.0000		0.0000	0.0000						
Total	0.4315	4.2151	6.1128	9.4800e-003		0.1938	0.1938		0.1794	0.1794						

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	lb/day										lb/day					
Hauling	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						
Worker	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						

3.7 Architectural Coating - 2024

1000 Seward Project - Los Angeles-South Coast County, Winter

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

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	lb/day										lb/day					
Archit. Coating	13.2458					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						
Total	13.2458	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	lb/day										lb/day					
Hauling	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						
Worker	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						

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	lb/day										lb/day					
Archit. Coating	13.2458					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						
Total	13.2458	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	lb/day										lb/day					
Hauling	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						

1000 Seward Project - Los Angeles-South Coast County, Winter

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

Worker	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						

1000 SEWARD
 FUTURE WITH PROJECT CONDITIONS

Signalized Intersections			Weekday Morning Peak Hour											Weekday Afternoon Peak Hour														
#	N/S Street	E/W Street	SBR	SBT	SBL	WBR	WBT	WBL	NBR	NBT	NBL	EBR	EBT	EBL	Total	SBR	SBT	SBL	WBR	WBT	WBL	NBR	NBT	NBL	EBR	EBT	EBL	Total
1	Seward Street	Santa Monica B	60	5	6	25	2,128	171	54	2	4	17	1,202	22	3,696	61	6	10	33	1,551	31	101	3	4	18	1,843	59	3,720
2	Wilcox Avenue	Santa Monica B	95	173	56	27	2,185	55	23	116	18	12	1,204	43	4,007	76	203	53	41	1,502	53	32	193	10	26	1,905	81	4,175
3	Seward Street	Romaine Street	59	118	18	19	39	34	38	145	26	52	48	12	608	24	63	14	28	72	23	37	283	28	29	75	53	729
4	Hudson Avenue	Romaine Street	34	94	24	134	50	74	8	47	7	49	16	48	585	62	98	46	71	55	19	7	62	5	58	122	93	698
5	Wilcox Avenue	Romaine Street	56	144	28	20	73	19	19	133	23	18	36	18	587	36	196	23	15	44	28	21	153	33	30	117	29	725

Max Hourly: 4,007
 Max Daily: 40,070

Max Hourly: 4,175
 Max Daily: 41,750

1000 Seward

Draft EIR

Appendix B-3-Greenhouse Gas Emissions Worksheets and Modeling Output Files

- Appendix B-3: Greenhouse Gas Worksheets and Modeling Output Files
 - Appendix B-3.1: GHG Modeling Parameters and Summary of Emissions
 - GHG Emissions Summary
 - GHG Parameters and Summary
 - Weekend Trip Generation
 - VMT Calculations
 - Modeling Parameters
 - Electric Vehicle Charging Calculations
 - Appendix B-3.2: CalEEMod Outputs
 - Existing (2020)
 - Existing (2025)
 - Project (With MXD and PDFs)
 - Project (Without MXD and PDFs)

CalEEMod Outputs

Construction Emissions - Annual

CalEEMod Output - Annual Construction

Year	CO2e	
2022	1,061	
2023	1,674	
2024	972	
30-year Amortized	124	3707

Operational Emissions - Annual

Category	Baseline (Existing Year) CO2e	Baseline (Buildout Year) - No MXD CO2e	Project (Buildout Year) No MXD/PDFs CO2e	Project (Buildout Year) - With MXD/PDFs/MMs CO2e	Project (Buildout Year) - No MXD less Baseline Increment	Project (Buildout Year) - With MMs less Baseline Increment
Area	0	0	0	0	0	0
Energy	112	97	1042	983	945	887
Mobile	220	189	2122	1264	1933	1075
EV			(32)	(32)	(32)	(32)
Stationary			2	2	2	2
Waste	5	5	33	33	28	28
Water	17	14	188	150	174	136
Operations Total	354	305	3355	2400	3050	2095
Construction Amortized			124	124	124	124
			3478	2524	3174	2219

1000 Seward Project

VMT Calculations for CalEEMod Inputs (Buildout)

VMT Summary

Existing Generation Rates for Weekend Scalar (CalEEMod Defaults)							Rate (Daily)				Daily Trips		
	DU/TSF	Weekday	Saturday	Sunday	Passby %	Weekday	Saturday	Sunday	Weekday	Saturday	Sunday		
High-Turnover Sit-Down Restaurant	ksf	2.551	127.15	158.37	131.84	20%	259	323	269				
Office	ksf	8.442	11.03	2.46	1.05	19%	75	17	7				

Generation Rates for Weekend Scalar (CalEEMod Defaults)							Rate (Daily)				Daily Trips		
	DU/TSF	Weekday	Saturday	Sunday	Passby %	Weekday	Saturday	Sunday	Weekday	Saturday	Sunday		
General Retail	ksf	2.2	44.32	42.04	20.43	40%	59	55	27				
High-Turnover Sit-Down Restaurant	ksf	12.2	127.15	158.37	131.84	20%	1241	1546	1287				
Office	ksf	136.2	11.03	2.46	1.05	19%	1217	271	116				
Parking Structure Unenclosed	PS	0	0	0	0	0	0	0	0				
Parking Structure Enclosed	PS	310	0	0	0	0	0	0	0				
Total							2516	1873	1430				

Daily Trips	Project Weekday Trips	Saturday Trips	Sunday Trips	Saturday Vs. Weekday Ratio	
				Weekday Ratio	Sunday Vs. Weekday Ratio
Daily Trips	2516	1873	1430	0.74	0.57

Project without TDM (MXD Data)

	Unadjusted Trips Pre MXD	MXD Adjustment	MXD Trips	Average Trip Length	Unadjusted Pre MXD VMT	MXD VMT	Percent Reduction for MXD
Home Based Work Production	0	0.0%	0	7.1	0	0	
Home Based Other Production	0	0.0%	0	4.7	0	0	
Non-Home Based Other Production	425	-5.4%	402	7.5	3188	3015	
Home-Based Work Attraction	867	-28.0%	624	9.0	7803	5616	
Home-Based Other Attraction	922	-49.7%	464	6.6	6,085	3062	
Non-Home Based Other Attraction	425	-5.4%	402	6.7	2848	2693	
Total	2,639		1,892		19,924	14,386	28%
Residential VMT			0		0	0	0.0 Population
Work VMT			1,892		5,616	598	9.4 Employees

Project with TDM (MXD Data)

	Proposed Project		Project with Mitigation Measures				Total	Residential VMT	Work VMT	Percent Reduction for MXD
	TDM Adjustment	Project Trips	Project VMT	TDM Adjustment	Mitigated Trips	Mitigated VMT				
Home Based Work Production	-17.8%	0	0	-17.8%	0	0				
Home Based Other Production	-17.8%	0	0	-17.8%	0	0				
Non-Home Based Other Production	-17.8%	330	2478	-17.8%	330	2478				
Home-Based Work Attraction	-19.7%	501	4509	-19.7%	501	4509				
Home-Based Other Attraction	-17.8%	381	2517	-17.8%	381	2517				
Non-Home Based Other Attraction	-17.8%	330	2213	-17.8%	330	2375			40%	
Total		1,542	11,717		1,542	11,879				
Residential VMT			0			0	0.0 Population	0		
Work VMT			11,717			4,509	7.5 Employees	598	19.864548	

Source: Gibson Transportation Consulting, Inc.

CalEEMod Inputs - PASTE THIS INTO CALEEMOD INPUT FILE

VehicleTripsLandUseSubType	VehicleTripsLandUseSizeMetric	WD_TR	ST_TR	SU_TR	HW_TL	HS_TL	HO_TL	CC_TL	CW_TL	CNW_TL	PR_TP	DV_TP	PB_TP	HW_TTP	HS_TTP	HO_TTP	CC_TTP	CW_TTP	CNW_TTP
Existing User Defined Commercial	User Defined Unit	223	227	183	0	0	0	7.35	0	0	100	0	0	0	0	0	100	0	0
No MXD User Defined Res. (VMT)	User Defined Unit	2,639	1,964	1,499	0	0	0	7.55	0	0	100	0	0	0	0	0	100	0	0
Project User Defined Res. (VMT)	User Defined Unit	1,892	1,408	1,075	0	0	0	7.60	0	0	100	0	0	0	0	0	100	0	0
Project TDM/MM User Defined Res. (VMT)	User Defined Unit	1,542	1,148	876	0	0	0	7.70	0	0	100	0	0	0	0	0	100	0	0

GHG Emissions Reductions for Commercial Uses Associated with City Codes (Electric Vehicle Charging Stations/Plugins)

Step 1: Estimating GHG Emissions Reduction to Replace Gasoline/Diesel Vehicle with Electric Vehicle

LADWP Electricity Emission Factor ^{1+A32}	0.28 MTCO ₂ E/MWh
Fuel Economy of Electric Vehicle ²	0.33 kWh/mile
Gasoline/Diesel CO ₂ Emissions While Running ³	204.6 grams/mile
Annual VMT Reduction per Parking Spot ⁴	9,125 miles/charging station/year
Number of On-Site Chargers ⁵	31
Annual VMT Reduction All Stations/Plugins (Based on Charge)	282,875

Step 2: Estimating GHG Emissions Reduction from Installing Electric Vehicle Charging Stations/Plugins

GHG Emissions of Gasoline/Diesel Vehicle	58 MTCO ₂ E/MWh
GHG Emissions of Electric Vehicle	26 MTCO ₂ E/MWh
GHG Emissions Reduction	32 MTCO₂E/MWh

Notes:

- 1) CO₂ intensity factor reflects a 2025 RPS for LADWP (616 lbs of CO₂E/MWh).
- 2) US Department of Energy, 2013. Benefits and Considerations of Electricity as a Vehicle Fuel. Available at: http://afdc.energy.gov/fuels/electricity_benefits.html.
- 3) CARB, 2017. EMFAC2014, running exhaust emission rate for CO₂ and CH₄ for light duty gasoline- and diesel-powered vehicles in Los Angeles, aggregated for all models and speeds, averaged over all seasons for 2035.
- 4) Annual VMT reduction estimated based on an estimate of 10 hours of charge time for a Level 2 charging station that charges at a rate of 25 driving range per hour. It is conservatively assumed that 20% of the miles charged would be driven by the charged vehicles.
- 5) City Code requires 10% of parking spaces to be equipped with EV chargers.

Calculation of Parking Garage Ventilation Energy Factor

Full Power Ventilation Flowrate:	0.5 cfm/sf	Section 120.6(c) of California Building Code, Mandatory Requirements for Enclosed Parking Garages, provides a minimum 0.15 cfm/sf flowrate. Conservatively assumed 0.5 cfm/sf.
Fan Horsepower/1,000 sf:	0.19 hp/1,000 sf	Fan Horsepower = (CFM x Static Pressure of 1.6 in WC)/(6356 x Motor Fan Efficiency of 65%)
Setback Mode Power Ventilation Flowrate:	0.05 cfm/sf	Energy Star technical reference recommends a minimum flow rate of 0.05 cfm/sf when fan is in setback mode.
Fan Horsepower/1,000 sf:	0.02 hp/1,000 sf	Fan Horsepower = (CFM x Static Pressure of 1.6 in WC)/(6356 x Motor Fan Efficiency of 65%)
Fan Horsepower/1,000 sf per Day:	1.51 hp/1,000 sf/Day	Energy Star technical reference recommends 6 hours per day at full power and 18 hours per day at 0.05 cfm/sf in setback mode
Horsepower to kW Conv.	0.746 kW per hp	
Fan kW/1,000 sf per Day:	1.13 kW/1,000 sf/Day	
Annual kW/sf	0.41 kWh/sf Annual	
Adjustment:	0.46 kWh/sf Annual	(CalEEMod applies mitigation to all land uses. So, this adjustment accounts for the 10% reduction in lighting associated with Title 24)

Consumer Products Use:

Calculated consistent with Appendix E3-Consumer Products Use (CalEEMod User's Guide)

		Total VOC (lbs/sf)
2008 ARB Emission Inventory (Consumer Products)	239.60	2.14E-05 Statewide Factor
SCAQMD Rule 1143 reduction to 25 g/l as of 1/1/11	17.50	1.98E-05 AQMD Factor

Notes: CalEEMod assumes a Statewide building area of 22,435,267,518 square feet in 2008.

Update to reflect 2012 ARB emission inventory (Consumer Products)

		Total VOC (lbs/sf)
2012 ARB emission Inventory (Consumer Products)	208.71	1.86E-05 Statewide Factor
SCAQMD Rule 1143 reduction to 25 g/l as of 1/1/11	17.50	1.70E-05 AQMD Factor

Notes: Conservatively assumes that Statewide building area of 22,435,267,518 square feet has not increased.

SB100 - Renewable Portfolio Standards

Year	% RPS	RPS Reduction (%)	Carbon Intensity (lbs/MWh)
2015	20	-20%	1131
2016	29	-31%	834
2017	31	-6%	780
2020	33	-6%	733
2026	46	-29%	520
2030	60	-23%	403
2036	65	-8%	372
2045	100	-35%	0

Build Out Year	Carbon Intensity (lbs/MWh)
2020	770
2025	616

1000 Seward Project (Existing Conditions) - Los Angeles-South Coast County, Annual
EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

1000 Seward Project (Existing Conditions)
Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	8.44	1000sqft	0.19	8,442.00	0
User Defined Commercial	1.00	User Defined Unit	0.00	0.00	0
High Turnover (Sit Down Restaurant)	2.55	1000sqft	0.06	2,551.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	12	Operational Year		2020	
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MWhr)	770	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

- Project Characteristics - Consistency with SB100 RPS for LADWP.
- Land Use - Rest = 2,551 sf
- Construction Phase - Site Specific Schedule
- Off-road Equipment - Site Specific
- Off-road Equipment - Site Specific
- Trips and VMT - Site Specific
- Demolition -
- Grading -
- Vehicle Trips - Site Specific
- Vehicle Emission Factors -
- Vehicle Emission Factors -
- Vehicle Emission Factors -
- Energy Use - Consistency with Section 120.6(c) CBC
- Construction Off-road Equipment Mitigation -
- Mobile Commute Mitigation -
- Energy Mitigation -
- Water Mitigation -
- Waste Mitigation -
- Fleet Mix -
- Stationary Sources - Emergency Generators and Fire Pumps -
- Stationary Sources - Emergency Generators and Fire Pumps EF - SCAQMD BACT

Table Name	Column Name	Default Value	New Value
tblLandUse	LandUseSquareFeet	8,440.00	8,442.00
tblLandUse	LandUseSquareFeet	2,550.00	2,551.00
tblProjectCharacteristics	CH4IntensityFactor	0.033	0.029
tblProjectCharacteristics	CO2IntensityFactor	691.98	770
tblProjectCharacteristics	N2OIntensityFactor	0.004	0.006
tblVehicleTrips	CC_TL	8.40	7.35
tblVehicleTrips	CC_TTP	0.00	100.00
tblVehicleTrips	CNW_TL	6.90	0.00

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

tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	PR_TP	0.00	100.00
tblVehicleTrips	ST_TR	2.21	0.00
tblVehicleTrips	ST_TR	122.40	0.00
tblVehicleTrips	ST_TR	0.00	227.00
tblVehicleTrips	SU_TR	0.70	0.00
tblVehicleTrips	SU_TR	142.64	0.00
tblVehicleTrips	SU_TR	0.00	183.00
tblVehicleTrips	WD_TR	9.74	0.00
tblVehicleTrips	WD_TR	112.18	0.00
tblVehicleTrips	WD_TR	0.00	223.00

2.0 Emissions Summary

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																3.2000e-004
Energy																111.8687
Mobile																220.0970
Waste																19.2058
Water																17.2428
Total																368.4146

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																3.2000e-004
Energy																111.8687
Mobile																220.0970
Waste																4.5326
Water																17.2428
Total																353.7413

1000 Seward Project (Existing Conditions) - Los Angeles-South Coast County, Annual

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.98

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																220.0970
Unmitigated																220.0970

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	0.00	0.00	0.00		
High Turnover (Sit Down Restaurant)	0.00	0.00	0.00		
User Defined Commercial	223.00	227.00	183.00	582,855	582,855
Total	223.00	227.00	183.00	582,855	582,855

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down Restaurant)	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
User Defined Commercial	0.00	7.35	0.00	0.00	100.00	0.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.551001	0.059862	0.185577	0.128146	0.022541	0.005543	0.010825	0.007967	0.000967	0.000632	0.022803	0.000681	0.003455
High Turnover (Sit Down Restaurant)	0.551001	0.059862	0.185577	0.128146	0.022541	0.005543	0.010825	0.007967	0.000967	0.000632	0.022803	0.000681	0.003455
User Defined Commercial	0.551001	0.059862	0.185577	0.128146	0.022541	0.005543	0.010825	0.007967	0.000967	0.000632	0.022803	0.000681	0.003455

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

Category	tons/yr	MT/yr
Electricity Mitigated		75.6550
Electricity Unmitigated		75.6550
NaturalGas Mitigated		36.2136
NaturalGas Unmitigated		36.2136

5.2 Energy by Land Use - NaturalGas

Unmitigated

Land Use	NaturalGas Use kBtu/yr	tons/yr										MT/yr					
		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
General Office Building	87037																4.6722
High Turnover (Sit Down Restaurant)	587572																31.5414
User Defined Commercial	0																0.0000
Total																	36.2136

Mitigated

Land Use	NaturalGas Use kBtu/yr	tons/yr										MT/yr					
		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
General Office Building	87037																4.6722
High Turnover (Sit Down Restaurant)	587572																31.5414
User Defined Commercial	0																0.0000
Total																	36.2136

5.3 Energy by Land Use - Electricity

Unmitigated

Land Use	Electricity Use kWh/yr	MT/yr			
		Total CO2	CH4	N2O	CO2e
General Office Building	105525				36.9766
High Turnover (Sit Down Restaurant)	110382				38.6784

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

User Defined Commercial	0	0.0000
Total		75.6550

Mitigated

Land Use	Electricity Use kWh/yr	Total CO2 MT/yr	CH4 MT/yr	N2O MT/yr	CO2e MT/yr
General Office Building	105525				36.9766
High Turnover (Sit Down Restaurant)	110382				38.6784
User Defined Commercial	0				0.0000
Total					75.6550

6.0 Area Detail

6.1 Mitigation Measures Area

Category	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
	tons/yr										MT/yr					
Mitigated																3.2000e-004
Unmitigated																3.2000e-004

6.2 Area by SubCategory

Unmitigated

SubCategory	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
	tons/yr										MT/yr					
Architectural Coating																0.0000
Consumer Products																0.0000
Landscaping																3.2000e-004
Total																3.2000e-004

1000 Seward Project (Existing Conditions) - Los Angeles-South Coast County, Annual
EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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
Consumer Products																0.0000
Landscaping																3.2000e-004
Total																3.2000e-004

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated				17.2428
Unmitigated				17.2428

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Office Building	1.500077 / 0.919399				12.4654
High Turnover (Sit Down Restaurant)	0.774011 / 0.049405				4.7774
User Defined Commercial	0 / 0				0.0000
Total					17.2428

Mitigated

1000 Seward Project (Existing Conditions) - Los Angeles-South Coast County, Annual

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

Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr		
General Office Building	1.500077 / 0.919399			12.4654
High Turnover (Sit Down Restaurant)	0.774011 / 0.049405			4.7774
User Defined Commercial	0 / 0			0.0000
Total				17.2428

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated				4.5326
Unmitigated				19.2058

8.2 Waste by Land Use

Unmitigated

Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr		
General Office Building	7.85			3.9478
High Turnover (Sit Down Restaurant)	30.34			15.2580
User Defined Commercial	0			0.0000
Total				19.2058

Mitigated

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

1000 Seward Project (Existing Conditions) - Los Angeles-South Coast County, Annual

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

General Office Building	1.8526				0.9317
High Turnover (Sit Down Restaurant)	7.16024				3.6008
User Defined Commercial	0				0.0000
Total					4.5326

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

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

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

User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

1000 Seward Project (Existing Conditions) - Los Angeles-South Coast County, Annual
EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

1000 Seward Project (Existing Conditions)
Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	8.44	1000sqft	0.19	8,442.00	0
User Defined Commercial	1.00	User Defined Unit	0.00	0.00	0
High Turnover (Sit Down Restaurant)	2.55	1000sqft	0.06	2,551.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	12	Operational Year	2025		
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MWhr)	616	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

- Project Characteristics - Consistency with SB100 RPS for LADWP.
- Land Use - Rest = 2,551 sf
- Construction Phase - Site Specific Schedule
- Off-road Equipment - Site Specific
- Off-road Equipment - Site Specific
- Trips and VMT - Site Specific
- Demolition -
- Grading -
- Vehicle Trips - Site Specific
- Energy Use - Consistency with Section 120.6(c) CBC
- Construction Off-road Equipment Mitigation -
- Mobile Commute Mitigation -
- Energy Mitigation -
- Water Mitigation -
- Waste Mitigation -
- Stationary Sources - Emergency Generators and Fire Pumps -
- Stationary Sources - Emergency Generators and Fire Pumps EF - SCAQMD BACT
- Vehicle Emission Factors -
- Vehicle Emission Factors -
- Vehicle Emission Factors -
- Fleet Mix -

Table Name	Column Name	Default Value	New Value
tblLandUse	LandUseSquareFeet	8,440.00	8,442.00
tblLandUse	LandUseSquareFeet	2,550.00	2,551.00
tblProjectCharacteristics	CO2IntensityFactor	691.98	616
tblVehicleTrips	CC_TL	8.40	7.35
tblVehicleTrips	CC_TTP	0.00	100.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	PR_TP	0.00	100.00

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tblVehicleTrips	ST_TR	2.21	0.00
tblVehicleTrips	ST_TR	122.40	0.00
tblVehicleTrips	ST_TR	0.00	227.00
tblVehicleTrips	SU_TR	0.70	0.00
tblVehicleTrips	SU_TR	142.64	0.00
tblVehicleTrips	SU_TR	0.00	183.00
tblVehicleTrips	WD_TR	9.74	0.00
tblVehicleTrips	WD_TR	112.18	0.00
tblVehicleTrips	WD_TR	0.00	223.00

2.0 Emissions Summary

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																3.2000e-004
Energy																96.7383
Mobile																189.2528
Waste																19.2058
Water																14.4134
Total																319.6106

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																3.2000e-004
Energy																96.7383
Mobile																189.2528
Waste																4.5326
Water																14.4134
Total																304.9374

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.59

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

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																189.2528
Unmitigated																189.2528

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	0.00	0.00	0.00		
High Turnover (Sit Down Restaurant)	0.00	0.00	0.00		
User Defined Commercial	223.00	227.00	183.00	582,855	582,855
Total	223.00	227.00	183.00	582,855	582,855

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down Restaurant)	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
User Defined Commercial	0.00	7.35	0.00	0.00	100.00	0.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.540171	0.064547	0.189075	0.126673	0.023412	0.006384	0.010926	0.008089	0.000929	0.000597	0.025155	0.000706	0.003335
High Turnover (Sit Down Restaurant)	0.540171	0.064547	0.189075	0.126673	0.023412	0.006384	0.010926	0.008089	0.000929	0.000597	0.025155	0.000706	0.003335
User Defined Commercial	0.540171	0.064547	0.189075	0.126673	0.023412	0.006384	0.010926	0.008089	0.000929	0.000597	0.025155	0.000706	0.003335

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																60.5247

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

Electricity Unmitigated																					60.5247	
NaturalGas Mitigated																						36.2136
NaturalGas Unmitigated																						36.2136

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						
General Office Building	87037																	4.6722
High Turnover (Sit Down Restaurant)	587572																	31.5414
User Defined Commercial	0																	0.0000
Total																		36.2136

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						
General Office Building	87037																	4.6722
High Turnover (Sit Down Restaurant)	587572																	31.5414
User Defined Commercial	0																	0.0000
Total																		36.2136

5.3 Energy by Land Use - Electricity
Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	105525				29.5816
High Turnover (Sit Down Restaurant)	110382				30.9431
User Defined Commercial	0				0.0000
Total					60.5247

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

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	105525				29.5816
High Turnover (Sit Down Restaurant)	110382				30.9431
User Defined Commercial	0				0.0000
Total					60.5247

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																3.2000e-004
Unmitigated																3.2000e-004

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
Consumer Products																0.0000
Landscaping																3.2000e-004
Total																3.2000e-004

Mitigated

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating																0.0000
Consumer Products																0.0000
Landscaping																3.2000e-004
Total																3.2000e-004

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated				14.4134
Unmitigated				14.4134

7.2 Water by Land Use

Unmitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Office Building	1.50007 / 0.919399				10.3808
High Turnover (Sit Down Restaurant)	0.774011 / 0.049405				4.0327
User Defined Commercial	0 / 0				0.0000
Total					14.4134

Mitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Land Use	Mgal	MT/yr		
General Office Building	1.500077			10.3808
High Turnover (Sit Down Restaurant)	0.774011			4.0327
User Defined Commercial	0 / 0			0.0000
Total				14.4134

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated				4.5326
Unmitigated				19.2058

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Office Building	7.85				3.9478
High Turnover (Sit Down Restaurant)	30.34				15.2580
User Defined Commercial	0				0.0000
Total					19.2058

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Office Building	1.8526				0.9317

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High Turnover (Sit-Down Restaurant)	7.16024				3.6009
User Defined Commercial	0				0.0000
Total					4.5326

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

1000 Seward Project - Los Angeles-South Coast County, Annual

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

1000 Seward Project
Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	136.20	1000sqft	3.13	136,200.00	0
User Defined Commercial	1.00	User Defined Unit	0.00	0.00	0
Enclosed Parking Structure	310.00	Space	2.79	124,000.00	0
High Turnover (Sit Down Restaurant)	12.20	1000sqft	0.28	12,200.00	0
Strip Mall	2.20	1000sqft	0.05	2,200.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	12	Operational Year		2025	
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MWhr)	616	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

- Project Characteristics - Consistency with SB100 RPS for LADWP.
- Land Use -
- Construction Phase - Site Specific Schedule
- Off-road Equipment - Site Specific
- Off-road Equipment - Site Specific
- Off-road Equipment - Site Specific
- Off-road Equipment - Site Specific
- Off-road Equipment - Site Specific
- Off-road Equipment - Site Specific
- Off-road Equipment - Site Specific
- Trips and VMT - Site Specific
- Demolition -
- Grading -
- Vehicle Trips - Site Specific
- Vehicle Emission Factors -
- Vehicle Emission Factors -
- Vehicle Emission Factors -
- Energy Use - Consistency with Section 120.6(c) CBC
- Water And Wastewater -
- Solid Waste -
- Construction Off-road Equipment Mitigation -
- Mobile Commute Mitigation -
- Energy Mitigation -
- Water Mitigation -
- Waste Mitigation -
- Fleet Mix -
- Stationary Sources - Emergency Generators and Fire Pumps -
- Stationary Sources - Emergency Generators and Fire Pumps EF - SCAQMD BACT

Table Name	Column Name	Default Value	New Value
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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblConstructionPhase	NumDays	20.00	108.00
tblConstructionPhase	NumDays	230.00	363.00
tblConstructionPhase	NumDays	20.00	16.00
tblConstructionPhase	NumDays	20.00	127.00
tblConstructionPhase	NumDays	20.00	108.00
tblConstructionPhase	NumDays	10.00	2.00
tblGrading	MaterialExported	0.00	55,000.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblProjectCharacteristics	CO2IntensityFactor	691.98	616
tblTripsAndVMT	HaulingTripNumber	50.00	0.00
tblTripsAndVMT	HaulingTripNumber	6,250.00	0.00
tblTripsAndVMT	VendorTripLength	6.90	68.00
tblTripsAndVMT	VendorTripLength	6.90	68.00
tblTripsAndVMT	VendorTripLength	6.90	13.80
tblTripsAndVMT	VendorTripLength	6.90	13.80
tblTripsAndVMT	VendorTripLength	6.90	13.80
tblTripsAndVMT	VendorTripLength	6.90	13.80
tblTripsAndVMT	VendorTripLength	6.90	13.80
tblTripsAndVMT	VendorTripNumber	0.00	25.00
tblTripsAndVMT	VendorTripNumber	0.00	115.00
tblTripsAndVMT	VendorTripNumber	0.00	180.00
tblTripsAndVMT	VendorTripNumber	45.00	95.00
tblTripsAndVMT	VendorTripNumber	0.00	15.00
tblTripsAndVMT	VendorTripNumber	0.00	15.00
tblTripsAndVMT	VendorVehicleClass	HDT_Mix	HHDT
tblTripsAndVMT	VendorVehicleClass	HDT_Mix	HHDT
tblTripsAndVMT	VendorVehicleClass	HDT_Mix	HHDT
tblTripsAndVMT	VendorVehicleClass	HDT_Mix	HHDT
tblTripsAndVMT	WorkerTripNumber	10.00	25.00
tblTripsAndVMT	WorkerTripNumber	15.00	75.00
tblTripsAndVMT	WorkerTripNumber	18.00	100.00
tblTripsAndVMT	WorkerTripNumber	101.00	350.00
tblTripsAndVMT	WorkerTripNumber	10.00	75.00
tblVehicleTrips	CC_TL	8.40	7.70
tblVehicleTrips	CC_TTP	0.00	100.00

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

tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	PR_TP	0.00	100.00
tblVehicleTrips	ST_TR	2.21	0.00
tblVehicleTrips	ST_TR	122.40	0.00
tblVehicleTrips	ST_TR	42.04	0.00
tblVehicleTrips	ST_TR	0.00	1,148.00
tblVehicleTrips	SU_TR	0.70	0.00
tblVehicleTrips	SU_TR	142.64	0.00
tblVehicleTrips	SU_TR	20.43	0.00
tblVehicleTrips	SU_TR	0.00	876.00
tblVehicleTrips	WD_TR	9.74	0.00
tblVehicleTrips	WD_TR	112.18	0.00
tblVehicleTrips	WD_TR	44.32	0.00
tblVehicleTrips	WD_TR	0.00	1,542.00

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					
2022																1,060.7085
2023																1,674.2614
2024																971.7644
Maximum																1,674.2614

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022																1,060.7083
2023																1,674.2610
2024																971.7641
Maximum																1,674.2610

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

Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)				Maximum Mitigated ROG + NOX (tons/quarter)									
		Highest														

2.2 Overall Operational
Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area																0.0122
Energy																1,042.2126
Mobile																1,263.7917
Stationary																1.9107
Waste																137.8755
Water																187.9400
Total																2,633.7426

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area																0.0122
Energy																983.3255
Mobile																1,263.7917
Stationary																1.9107
Waste																32.5386
Water																150.3520
Total																2,431.9307

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.66

3.0 Construction Detail

Construction Phase

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

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2022	9/22/2022	5	16	
2	Grading	Grading	9/23/2022	3/20/2023	5	127	
3	Mat Foundation	Site Preparation	4/1/2023	4/4/2023	5	2	
4	Building Construction	Building Construction	4/11/2023	8/29/2024	5	363	
5	Paving	Paving	4/1/2024	8/28/2024	5	108	
6	Architectural Coating	Architectural Coating	4/1/2024	8/28/2024	5	108	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 63.5

Acres of Paving: 2.79

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 225,900; Non-Residential Outdoor: 75,300; Striped Parking Area: 7,440

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Excavators	1	8.00	158	0.38
Demolition	Rubber Tired Dozers	0	8.00	247	0.40
Demolition	Rubber Tired Loaders	2	8.00	203	0.36
Demolition	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Bore/Drill Rigs	1	8.00	221	0.50
Grading	Cranes	1	8.00	231	0.29
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Plate Compactors	1	8.00	8	0.43
Grading	Rubber Tired Dozers	0	8.00	247	0.40
Grading	Rubber Tired Loaders	1	8.00	203	0.36
Grading	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Mat Foundation	Cranes	1	12.00	231	0.29
Mat Foundation	Pumps	4	12.00	84	0.74
Mat Foundation	Rubber Tired Dozers	0	8.00	247	0.40
Mat Foundation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Mat Foundation	Welders	2	8.00	46	0.45
Building Construction	Aerial Lifts	2	8.00	63	0.31
Building Construction	Air Compressors	2	8.00	78	0.48
Building Construction	Cranes	0	7.00	231	0.29
Building Construction	Forklifts	2	8.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Plate Compactors	1	8.00	8	0.43
Building Construction	Pumps	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Welders	2	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	0	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	8.00	80	0.38
Paving	Skid Steer Loaders	1	8.00	65	0.37
Architectural Coating	Air Compressors	0	6.00	78	0.48

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

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition		4	25.00	25.00	0.00	14.70	68.00	20.00:LD_Mix	HHDT	HHDT
Grading		6	75.00	115.00	0.00	14.70	68.00	20.00:LD_Mix	HHDT	HHDT
Mat Foundation		7	100.00	180.00	0.00	14.70	13.80	20.00:LD_Mix	HHDT	HHDT
Building Construction		11	350.00	95.00	0.00	14.70	13.80	20.00:LD_Mix	HHDT	HHDT
Paving		4	75.00	15.00	0.00	14.70	13.80	20.00:LD_Mix	HDT_Mix	HHDT
Architectural Coating		0	20.00	15.00	0.00	14.70	13.80	20.00:LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust																0.0000
Off-Road																14.7244
Total																14.7244

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
Vendor																42.7006
Worker																1.8185
Total																44.5191

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					

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Fugitive Dust																		0.0000
Off-Road																		14.7244
Total																		14.7244

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
Vendor																	42.7006
Worker																	1.8185
Total																	44.5191

3.3 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr										MT/yr						
Fugitive Dust																	0.0000
Off-Road																	105.6309
Total																	105.6309

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
Vendor																	871.6259
Worker																	24.2082
Total																	895.8341

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

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
Off-Road																	105.6308
Total																	105.6308

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
Vendor																	871.6259
Worker																	24.2082
Total																	895.8341

3.3 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr										MT/yr						
Fugitive Dust																	0.0000
Off-Road																	83.3503
Total																	83.3503

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					

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

Hauling																		0.0000
Vendor																		648.9443
Worker																		18.4714
Total																		667.4157

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
Off-Road																	83.3502
Total																	83.3502

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
Vendor																	648.9443
Worker																	18.4714
Total																	667.4157

3.4 Mat Foundation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr										MT/yr						
Fugitive Dust																	0.0000
Off-Road																	4.5392
Total																	4.5392

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

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
Vendor																7.7466
Worker																0.8796
Total																8.6262

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
Off-Road																4.5392
Total																4.5392

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
Vendor																7.7466
Worker																0.8796
Total																8.6262

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Category	tons/yr										MT/yr						
Off-Road																	233.0449
Total																	233.0449

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
Vendor																	386.3609
Worker																	290.9243
Total																	677.2852

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																	233.0446
Total																	233.0446

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
Vendor																	386.3609
Worker																	290.9243
Total																	677.2852

3.5 Building Construction - 2024

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

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																214.5494
Total																214.5494

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
Vendor																350.6785
Worker																260.1634
Total																610.8419

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																214.5491
Total																214.5491

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
Vendor																350.6785
Worker																260.1634

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

Total																		610.8419
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3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr										MT/yr						
Off-Road																	44.4170
Paving																	0.0000
Total																	44.4170

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
Vendor																	29.0628
Worker																	34.6030
Total																	63.6658

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																	44.4170
Paving																	0.0000
Total																	44.4170

Mitigated Construction Off-Site

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling																0.0000
Vendor																29.0628
Worker																34.6030
Total																63.6658

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating																0.0000
Off-Road																0.0000
Total																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
Vendor																29.0628
Worker																9.2275
Total																38.2903

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																0.0000
Off-Road																0.0000

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

Total																		0.0000
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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
Vendor																	29.0628
Worker																	9.2275
Total																	38.2903

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																	1,263.7917
Unmitigated																	1,263.7917

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated Annual VMT	Mitigated Annual VMT
	Weekday	Saturday	Sunday		
Enclosed Parking Structure	0.00	0.00	0.00		
General Office Building	0.00	0.00	0.00		
High Turnover (Sit Down Restaurant)	0.00	0.00	0.00		
Strip Mall	0.00	0.00	0.00		
User Defined Commercial	1,542.00	1,148.00	876.00	3,897,494	3,897,494
Total	1,542.00	1,148.00	876.00	3,897,494	3,897,494

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Enclosed Parking Structure	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down)	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Strip Mall	16.60	8.40	6.90	16.60	64.40	19.00	45	40	15

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

User Defined Commercial	0.00	7.70	0.00	0.00	100.00	0.00	100	0	0
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4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Enclosed Parking Structure	0.540171	0.064547	0.189075	0.126673	0.023412	0.006384	0.010926	0.008089	0.000929	0.000597	0.025155	0.000706	0.003335
General Office Building	0.540171	0.064547	0.189075	0.126673	0.023412	0.006384	0.010926	0.008089	0.000929	0.000597	0.025155	0.000706	0.003335
High Turnover (Sit Down Restaurant)	0.540171	0.064547	0.189075	0.126673	0.023412	0.006384	0.010926	0.008089	0.000929	0.000597	0.025155	0.000706	0.003335
Strip Mall	0.540171	0.064547	0.189075	0.126673	0.023412	0.006384	0.010926	0.008089	0.000929	0.000597	0.025155	0.000706	0.003335
User Defined Commercial	0.540171	0.064547	0.189075	0.126673	0.023412	0.006384	0.010926	0.008089	0.000929	0.000597	0.025155	0.000706	0.003335

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Install High Efficiency Lighting

	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																756.9083
Electricity Unmitigated																815.7954
NaturalGas Mitigated																226.4172
NaturalGas Unmitigated																226.4172

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					
Enclosed Parking Structure	0																0.0000
General Office Building	1.40422e+006																75.3799
High Turnover (Sit Down Restaurant) Strip Mall	2.81003e+006																150.8448
User Defined Commercial	0																0.1925
Total																	226.4172

Mitigated

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

	Natural Gas 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						
Enclosed Parking Structure	0																	0.0000
General Office Building	1.40422e+006																	75.3799
High Turnover (Sit Down Restaurant)	2.81003e+006																	150.8448
Strip Mall	3586																	0.1925
User Defined Commercial	0																	0.0000
Total																		226.4172

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Enclosed Parking Structure	651000				182.4934
General Office Building	1.7025e+006				477.2581
High Turnover (Sit Down Restaurant)	527894				147.9834
Strip Mall	28754				8.0606
User Defined Commercial	0				0.0000
Total					815.7954

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Enclosed Parking Structure	596750				167.2856
General Office Building	1.57413e+006				441.2728
High Turnover (Sit Down Restaurant)	503890				141.2545
Strip Mall	25311				7.0954
User Defined Commercial	0				0.0000
Total					756.9083

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

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																0.0122
Unmitigated																0.0122

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
Consumer Products																0.0000
Landscaping																0.0122
Total																0.0122

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
Consumer Products																0.0000
Landscaping																0.0122
Total																0.0122

7.0 Water Detail

7.1 Mitigation Measures Water

1000 Seward Project - Los Angeles-South Coast County, Annual

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

Apply Water Conservation Strategy

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated				150.3520
Unmitigated				187.9400

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Enclosed Parking Structure	0 / 0				0.0000
General Office Building	24.2073 / 14.8368				167.5187
High Turnover (Sit Down Restaurant)	3.70311 / 0.236369				19.2936
Strip Mall	0.16296 / 0.0998784				1.1277
User Defined Commercial	0 / 0				0.0000
Total					187.9400

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Enclosed Parking Structure	0 / 0				0.0000
General Office Building	19.3659 / 11.8694				134.0149
High Turnover (Sit Down Restaurant)	2.96249 / 0.189095				15.4349
Strip Mall	0.130368 / 0.0799027				0.9022
User Defined Commercial	0 / 0				0.0000
Total					150.3520

1000 Seward Project - Los Angeles-South Coast County, Annual

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

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated				32.5386
Unmitigated				137.8755

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Enclosed Parking Structure	0				0.0000
General Office Building	126.67				63.7025
High Turnover (Sit Down Restaurant)	145.18				73.0112
Strip Mall	2.31				1.1617
User Defined Commercial	0				0.0000
Total					137.8755

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Enclosed Parking Structure	0				0.0000
General Office Building	29.8941				15.0338
High Turnover (Sit Down Restaurant)	34.2625				17.2307
Strip Mall	0.54516				0.2742
User Defined Commercial	0				0.0000
Total					32.5386

1000 Seward Project - Los Angeles-South Coast County, Annual

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

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	1	0.25	10	500	0.73	Diesel

Boilers

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

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

10.1 Stationary Sources

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						
Emergency Generator - Diesel																	1.9107
Total																	1.9107

11.0 Vegetation

1000 Seward Project-No Project Design Features or MXD - Los Angeles-South Coast County, Annual
EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

1000 Seward Project-No Project Design Features or MXD
Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	136.20	1000sqft	3.13	136,200.00	0
User Defined Commercial	1.00	User Defined Unit	0.00	0.00	0
Enclosed Parking Structure	310.00	Space	2.79	124,000.00	0
High Turnover (Sit Down Restaurant)	12.20	1000sqft	0.28	12,200.00	0
Strip Mall	2.20	1000sqft	0.05	2,200.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	12	Operational Year		2025	
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MWhr)	616	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Consistency with SB100 RPS for LADWP.

Land Use -

Construction Phase - Site Specific Schedule

Off-road Equipment - Site Specific

Off-road Equipment - Site Specific

Off-road Equipment - Site Specific

Off-road Equipment - Site Specific

Off-road Equipment - Site Specific

Off-road Equipment - Site Specific

Trips and VMT - Site Specific

Demolition -

Grading -

Vehicle Trips - Site Specific

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Energy Use - Consistency with Section 120.6(c) CBC

Water And Wastewater -

Solid Waste -

Construction Off-road Equipment Mitigation -

Mobile Commute Mitigation -

Energy Mitigation -

Water Mitigation -

Waste Mitigation -

Fleet Mix -

Stationary Sources - Emergency Generators and Fire Pumps -

Stationary Sources - Emergency Generators and Fire Pumps EF - SCAQMD BACT

Table Name	Column Name	Default Value	New Value
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1000 Seward Project-No Project Design Features or MXD - Los Angeles-South Coast County, Annual

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

tblConstructionPhase	NumDays	20.00	16.00
tblConstructionPhase	NumDays	20.00	127.00
tblConstructionPhase	NumDays	10.00	2.00
tblConstructionPhase	NumDays	230.00	363.00
tblConstructionPhase	NumDays	20.00	108.00
tblConstructionPhase	NumDays	20.00	108.00
tblGrading	MaterialExported	0.00	50,000.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblProjectCharacteristics	CO2IntensityFactor	691.98	616
tblTripsAndVMT	HaulingTripNumber	50.00	0.00
tblTripsAndVMT	HaulingTripNumber	6,250.00	0.00
tblTripsAndVMT	VendorTripLength	6.90	68.00
tblTripsAndVMT	VendorTripLength	6.90	68.00
tblTripsAndVMT	VendorTripLength	6.90	13.80
tblTripsAndVMT	VendorTripLength	6.90	13.80
tblTripsAndVMT	VendorTripLength	6.90	13.80
tblTripsAndVMT	VendorTripLength	6.90	13.80
tblTripsAndVMT	VendorTripLength	6.90	13.80
tblTripsAndVMT	VendorTripNumber	0.00	25.00
tblTripsAndVMT	VendorTripNumber	0.00	115.00
tblTripsAndVMT	VendorTripNumber	0.00	180.00
tblTripsAndVMT	VendorTripNumber	45.00	95.00
tblTripsAndVMT	VendorTripNumber	0.00	15.00
tblTripsAndVMT	VendorTripNumber	0.00	15.00
tblTripsAndVMT	VendorVehicleClass	HDT_Mix	HHDT
tblTripsAndVMT	VendorVehicleClass	HDT_Mix	HHDT
tblTripsAndVMT	VendorVehicleClass	HDT_Mix	HHDT
tblTripsAndVMT	VendorVehicleClass	HDT_Mix	HHDT
tblTripsAndVMT	WorkerTripNumber	10.00	25.00
tblTripsAndVMT	WorkerTripNumber	15.00	75.00
tblTripsAndVMT	WorkerTripNumber	18.00	100.00
tblTripsAndVMT	WorkerTripNumber	101.00	350.00
tblTripsAndVMT	WorkerTripNumber	10.00	75.00
tblVehicleTrips	CC_TL	8.40	7.55
tblVehicleTrips	CC_TTP	0.00	100.00

1000 Seward Project-No Project Design Features or MXD - Los Angeles-South Coast County, Annual

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

tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	PR_TP	0.00	100.00
tblVehicleTrips	ST_TR	2.21	0.00
tblVehicleTrips	ST_TR	122.40	0.00
tblVehicleTrips	ST_TR	42.04	0.00
tblVehicleTrips	ST_TR	0.00	1,964.00
tblVehicleTrips	SU_TR	0.70	0.00
tblVehicleTrips	SU_TR	142.64	0.00
tblVehicleTrips	SU_TR	20.43	0.00
tblVehicleTrips	SU_TR	0.00	1,499.00
tblVehicleTrips	WD_TR	9.74	0.00
tblVehicleTrips	WD_TR	112.18	0.00
tblVehicleTrips	WD_TR	44.32	0.00
tblVehicleTrips	WD_TR	0.00	2,639.00

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area																0.0122
Energy																1,042.2126
Mobile																2,121.8281
Stationary																1.9107
Waste																137.8755
Water																187.9400
Total																3,491.7790

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area																0.0122
Energy																1,042.2126
Mobile																2,121.8281
Stationary																1.9107

1000 Seward Project-No Project Design Features or MXD - Los Angeles-South Coast County, Annual

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

Waste																					32.5386	
Water																						187.9400
Total																						3,386.4421

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio-CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.02

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																	2,121.8281
Unmitigated																	2,121.8281

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated Annual VMT	Mitigated Annual VMT
	Weekday	Saturday	Sunday		
Enclosed Parking Structure	0.00	0.00	0.00		
General Office Building	0.00	0.00	0.00		
High Turnover (Sit Down Restaurant)	0.00	0.00	0.00		
Strip Mall	0.00	0.00	0.00		
User Defined Commercial	2,639.00	1,964.00	1,499.00	6,539,931	6,539,931
Total	2,639.00	1,964.00	1,499.00	6,539,931	6,539,931

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Enclosed Parking Structure	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down Restaurant)	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Strip Mall	16.60	8.40	6.90	16.60	64.40	19.00	45	40	15
User Defined Commercial	0.00	7.55	0.00	0.00	100.00	0.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Enclosed Parking Structure	0.540171	0.064547	0.189075	0.126673	0.023412	0.006384	0.010926	0.008089	0.000929	0.000597	0.025155	0.000706	0.003335
General Office Building	0.540171	0.064547	0.189075	0.126673	0.023412	0.006384	0.010926	0.008089	0.000929	0.000597	0.025155	0.000706	0.003335
High Turnover (Sit Down Restaurant)	0.540171	0.064547	0.189075	0.126673	0.023412	0.006384	0.010926	0.008089	0.000929	0.000597	0.025155	0.000706	0.003335
Strip Mall	0.540171	0.064547	0.189075	0.126673	0.023412	0.006384	0.010926	0.008089	0.000929	0.000597	0.025155	0.000706	0.003335
User Defined Commercial	0.540171	0.064547	0.189075	0.126673	0.023412	0.006384	0.010926	0.008089	0.000929	0.000597	0.025155	0.000706	0.003335

1000 Seward Project-No Project Design Features or MXD - Los Angeles-South Coast County, Annual
EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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																815.7954
Electricity Unmitigated																815.7954
NaturalGas Mitigated																226.4172
NaturalGas Unmitigated																226.4172

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					
Enclosed Parking Structure	0																0.0000
General Office Building	1.40422e+006																75.3799
High Turnover (Sit Down Restaurant)	2.81003e+006																150.8448
Strip Mall	3586																0.1925
User Defined Commercial	0																0.0000
Total																	226.4172

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					
Enclosed Parking Structure	0																0.0000
General Office Building	1.40422e+006																75.3799
High Turnover (Sit Down Restaurant)	2.81003e+006																150.8448

1000 Seward Project-No Project Design Features or MXD - Los Angeles-South Coast County, Annual

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

Strip Mall	3586														0.1925
User Defined Commercial	0														0.0000
Total															226.4172

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Enclosed Parking Structure	651000				182.4934
General Office Building	1.7025e+06				477.2581
High Turnover (Sit Down Restaurant)	527894				147.9834
Strip Mall	28754				8.0606
User Defined Commercial	0				0.0000
Total					815.7954

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Enclosed Parking Structure	651000				182.4934
General Office Building	1.7025e+06				477.2581
High Turnover (Sit Down Restaurant)	527894				147.9834
Strip Mall	28754				8.0606
User Defined Commercial	0				0.0000
Total					815.7954

6.0 Area Detail

6.1 Mitigation Measures Area

1000 Seward Project-No Project Design Features or MXD - Los Angeles-South Coast County, Annual

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated																0.0122
Unmitigated																0.0122

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
Consumer Products																0.0000
Landscaping																0.0122
Total																0.0122

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
Consumer Products																0.0000
Landscaping																0.0122
Total																0.0122

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated				187.9400

1000 Seward Project-No Project Design Features or MXD - Los Angeles-South Coast County, Annual

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

Unmitigated	187.9400
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7.2 Water by Land Use

Unmitigated

Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr		
Enclosed Parking Structure	0 / 0			0.0000
General Office Building	24.2073 / 14.8368			167.5187
High Turnover (Sit Down Restaurant)	3.70311 / 0.236369			19.2936
Strip Mall	0.16296 / 0.0998784			1.1277
User Defined Commercial	0 / 0			0.0000
Total				187.9400

Mitigated

Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr		
Enclosed Parking Structure	0 / 0			0.0000
General Office Building	24.2073 / 14.8368			167.5187
High Turnover (Sit Down Restaurant)	3.70311 / 0.236369			19.2936
Strip Mall	0.16296 / 0.0998784			1.1277
User Defined Commercial	0 / 0			0.0000
Total				187.9400

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

Total CO2	CH4	N2O	CO2e
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1000 Seward Project-No Project Design Features or MXD - Los Angeles-South Coast County, Annual

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

	MT/yr
Mitigated	32.5386
Unmitigated	137.8755

8.2 Waste by Land Use

Unmitigated

Land Use	Waste Disposed tons	Total CO2 MT/yr	CH4	N2O	CO2e
Enclosed Parking Structure	0				0.0000
General Office Building	126.67				63.7025
High Turnover (Sit Down Restaurant)	145.18				73.0112
Strip Mall	2.31				1.1617
User Defined Commercial	0				0.0000
Total					137.8755

Mitigated

Land Use	Waste Disposed tons	Total CO2 MT/yr	CH4	N2O	CO2e
Enclosed Parking Structure	0				0.0000
General Office Building	29.8941				15.0338
High Turnover (Sit Down Restaurant)	34.2625				17.2307
Strip Mall	0.54516				0.2742
User Defined Commercial	0				0.0000
Total					32.5386

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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1000 Seward Project-No Project Design Features or MXD - Los Angeles-South Coast County, Annual

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

Emergency Generator	1	0.25	10	500	0.73	Diesel
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Boilers

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

Equipment Type	Number
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10.1 Stationary Sources

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					
Emergency Generator - Diesel																1.9107
Total																1.9107

11.0 Vegetation
