Appendix C Del Amo Circle Apartments Project Air Quality and Greenhouse Gas Emissions Technical Memorandum

Appendices

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TECHNICAL MEMORANDUM

DATE	August 15, 2022
TO	Legacy Partners
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CONTACT	David Pinto, Vice President, Development
FROM	John Vang, Senior Associate
SUBJECT	Del Amo Circle Apartments Project Air Quality and Greenhouse Gas Emissions Technical Memorandum
PROJECT NUMBER	LEGP-01

This technical memorandum is prepared for Legacy Partners (Project Applicant) to evaluate the potential air quality and greenhouse gas (GHG) emissions impacts pursuant to the California Environmental Quality Act (CEQA) for the proposed Del Amo Circle Apartments project (proposed project) in the City of Torrance.

Project Location

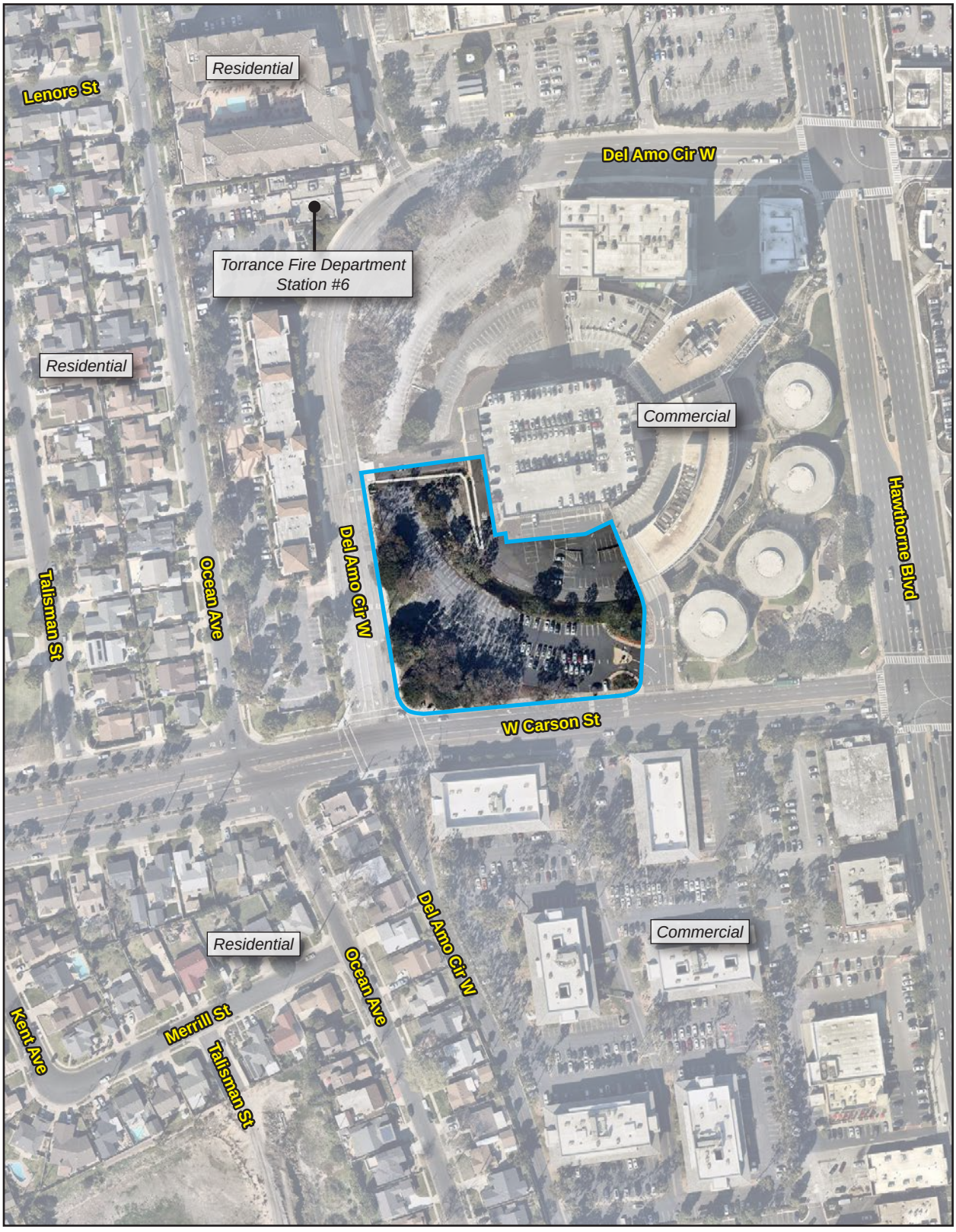
As shown in Figure 1, *Project Location*, the 2.83-acre project site is in the northeast corner of the intersection of West Carson Street and Del Amo Circle West in the City of Torrance, Los Angeles County, California. The site is bounded by Del Amo Circle West to the west, West Carson Street to the south, office buildings and a parking structure to the east, and surface parking to the north.

Project Description

Legacy Partners is proposing to develop a multifamily residential project on the 2.83-acre project site. The proposed project would construct a 234,928-square-foot, multistory apartment building providing 200 dwelling units in five levels, a leasing office, mail/lounge area, and co-working space. The proposed project would include a rooftop pool and 5,638 square feet of space to accommodate a rooftop clubhouse and fitness center. It would also construct a 169,946-square-foot multilevel parking structure providing a total of 440 parking spaces, with 44 spaces reserved for electric vehicle parking. The proposed parking structure would consist of seven above-ground levels. Other improvements include landscaping along the perimeter and interior open areas of the project site. Also, a new accessway would involve improvements to an approximately 0.09-acre off-site area that includes a portion of the existing driveway on West Carson Street. The project site plan is shown on Figure 2, *Project Plan*.

Overall, construction would occur from August 2023 to December 2025, a duration of approximately 28 months. Construction activities would generally involve demolition of the existing landscaping and surface parking lot, site preparation, grading, vertical construction of the apartment building and parking structure, architectural coating, and paving.

Figure 1 - Project Location

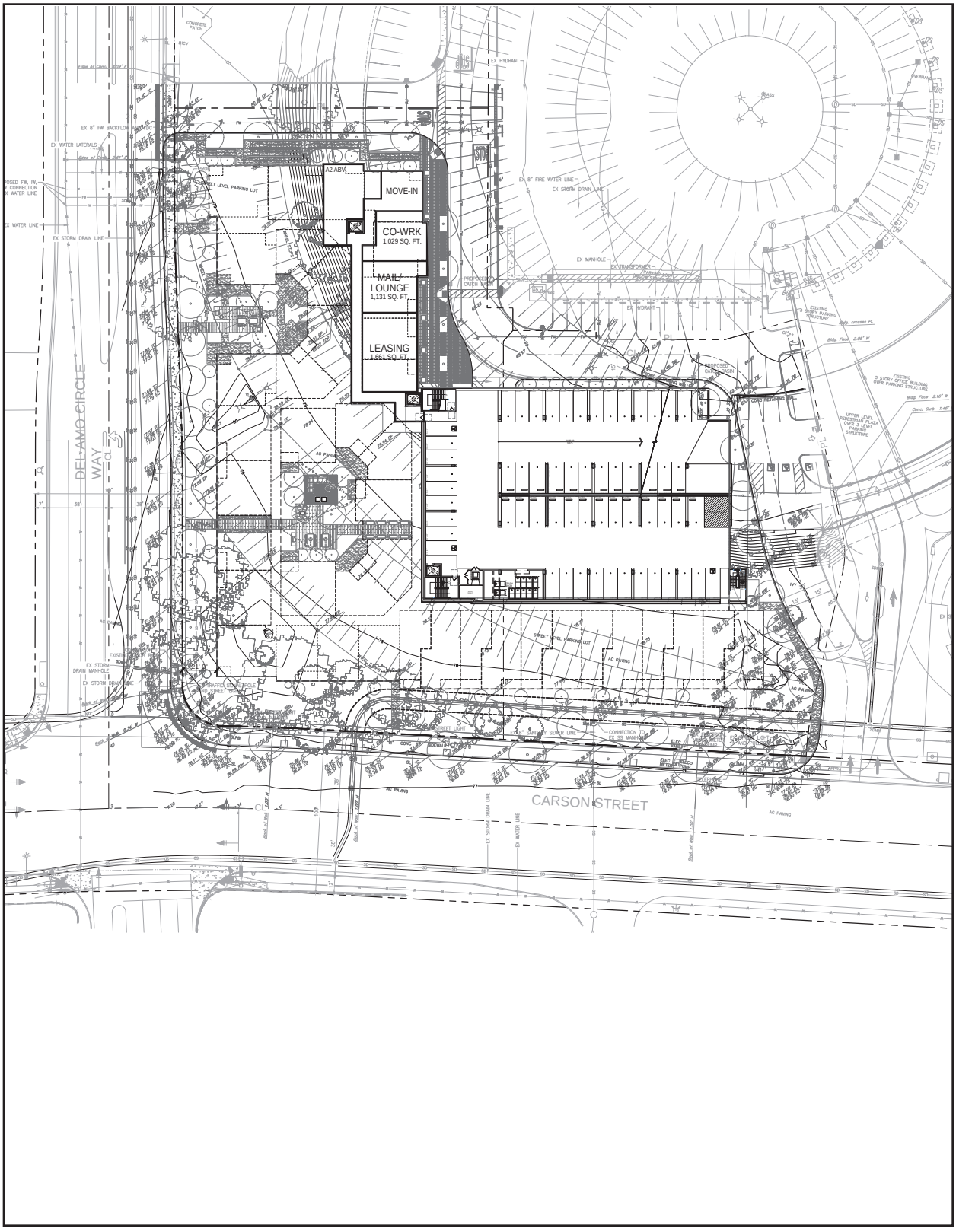


Project Boundary

0 235
Scale (Feet)

Source: Nearmap, 2022

Figure 2 - Project Site Plan



Source: AO, 2022

Modeling Methodology

This analysis evaluates the impacts of the project based on the significance criteria of the South Coast Air Quality Management District (South Coast AQMD). The analysis focuses on air pollution from regional emissions and localized pollutant concentrations. "Emission" refers to the actual quantity of pollutant, measured in pounds per day. "Concentration" refers to the amount of pollutant material per volumetric unit of air. Concentrations are measured in parts per million (ppm) or micrograms per cubic meter ($\mu g/m^3$). Emissions of the proposed project are modeled using the California Emissions Estimator Model (CalEEMod), Version 2020.4.0. Modeling emissions worksheets, assumptions, and output files are provided in Appendices A through D of this memorandum. In addition, a background discussion and overview of the relevant air quality and GHG regulations and plans are provided in Appendix E.

The operational-phase, project-related emissions are based on development and operation of the new proposed residential land use. The modeling accounts for the average daily vehicle trips generated, energy usage, water demand, and wastewater and solid waste generation from operation of the proposed project. Construction emissions are based on information provided for the project. Where specific information was not available, CalEEMod default values were utilized. Life cycle emissions are not included in this analysis because not enough information is available.[1]

- **Transportation.** The average daily trip (ADT) generation was provided by Linscott, Law & Greenspan Engineers (LLG) (Appendix D). Overall, the proposed project would generate up to 908 weekday ADTs, 914 Saturday ADTs, and 754 Sunday ADTs. Project-related on-road criteria air pollutant and GHG emissions are based on CalEEMod default year 2025 emission rates. The primary source of mobile criteria air pollutant and GHG emissions is tailpipe exhaust emissions from the combustion of fuel. For criteria air pollutants, brake and tire wear and fugitive dust created from vehicles traveling roadways also generate particulate matter.
- **Energy Use.** The CalEEMod default energy rates (i.e., electricity and natural gas) are utilized and are based on the 2019 Building Energy Efficiency Standards. Natural gas used for heating and cooking would generate criteria air pollutant and GHG emissions, and electricity demand would generate GHG emissions.
- **Water/Wastewater.** The indoor water demand of 42,162 gallons per day is provided by Fuscoe Engineering. For purposes of this analysis, it is assumed the proposed project would generate an annual indoor water demand of 15,389,130 gallons per year (GPY) based on 365 days per year (Appendix D). Annual outdoor water demand of 317,217 GPY is provided by MJS Landscape Architecture (Appendix D). GHG emissions from this sector are attributed to the energy used for treatment and distribution of water and wastewater.
- **Solid Waste.** Solid waste generation for the proposed uses is based on CalEEMod defaults. GHG emissions are associated with the decomposition of solid waste.

[1] Life cycle emissions include indirect emissions associated with materials manufacture. However, these indirect emissions involve numerous parties, each of which is responsible for GHG emissions of their particular activity. The California Resources Agency, in adopting the CEQA Guidelines Amendments on GHG emissions found that lifecycle analysis was not warranted for project-specific CEQA analysis in most situations, for a variety of reasons, including lack of control over some sources, and the possibility of double-counting emissions (see Final Statement of Reasons for Regulatory Action, December 2009). Because the amount of materials consumed during the operation or construction of the proposed project is not known, the origin of the raw materials purchased is not known, and manufacturing information for those raw materials is also not known, calculation of life cycle emissions would be speculative. A life-cycle analysis is not warranted (OPR 2008).

» **Area Sources.** Area source emissions from use of consumer cleaning products and VOC emissions from paints are based on CalEEMod default values and the square footage of the proposed apartment building and parking structure.

» **Construction.** Construction of the proposed project is anticipated to commence August 2023 and be completed in December 2025, a duration of approximately 28 months. Approximately 3,250 tons of asphalt demolition debris and 11,200 cubic yards of earthen material would be hauled off-site. Table 1, *Construction Activities, Phasing, and Equipment*, shows the assumed construction activities, phasing, and construction equipment based on information provided and CalEEMod defaults. Emissions of volatile organic compounds (VOC) would primarily be from the application of paints, asphalt pavement, and operation of construction vehicles and off-road equipment. Emissions of nitrogen oxides (NO_X), carbon monoxide (CO), and sulfur oxides (SO_X) would primarily be generated from operation of off-road construction equipment in addition to construction worker and vendor vehicles. Coarse and fine particulate matter (PM_{10} and $PM_{2.5}$) exhaust emissions would also be generated from operation of off-road construction equipment and construction and vendor vehicle trips. In addition, fugitive dust emissions of PM_{10} and $PM_{2.5}$ would be generated from ground disturbance activities, asphalt demolition, and movement of earthen material.

Table 1 Construction Activities, Phasing, and Equipment

Activities[1]	Start/End Dates[1]	Equipment[1]
Asphalt Demolition	8/14/2023 to 9/06/2023	1 concrete industrial saw, 1 rubber tired dozer, and 3 tractors/loaders/backhoes
Site Preparation	9/07/2023 to 9/18/2023	1 grader, 1 scraper, and 1 tractor/loader/backhoe
Grading	9/19/2023 to 12/08/2023	1 grader, 1 rubber tired dozer, and 2 tractors/loaders/backhoes
Building Construction	12/09/2023 to 11/28/2025	1 crane, 2 forklifts, 1 generator set, 1 tractor/loader/backhoe, and 3 welders
Architectural Coating	10/29/2025 to 11/28/2025	1 air compressor
Paving	11/15/2025 to 12/15/2025	1 cement and mortar mixer, 1 paver, 1 paving equipment, 2 rollers, and 1 tractor/loader/backhoe

Notes:
[1] Based on information provided or verified by the Project Applicant and CalEEMod defaults.

Thresholds of Significance

AIR QUALITY

The analysis of the proposed project's air quality impacts follows the guidance and methodologies recommended in the *CEQA Air Quality Handbook* and the significance thresholds on South Coast AQMD's website (South Coast AQMD 1993, 2022). CEQA allows the significance criteria established by the applicable air quality management or air pollution control district to be used to assess a project's impacts on air quality. South Coast AQMD has established thresholds of significance for regional air quality emissions for construction activities and project operation. In addition to the daily thresholds, projects are also subject to the ambient air quality standards (AAQS). These are addressed though an analysis of localized CO impacts and localized significance thresholds (LSTs).

Regional Significance Thresholds

South Coast AQMD has adopted regional construction and operational emissions thresholds to determine a project's cumulative impact on air quality in the South Coast Air Basin (SoCAB). Table 2, *South Coast AQMD Regional Significance Thresholds*, lists thresholds that are applicable for all projects uniformly, regardless of size or scope. There is growing evidence that although ultrafine particulates ($PM_{1.0}$) contribute a very small portion of the overall atmospheric mass concentration, they represent a greater proportion of the health risk from particulate matter (PM). However, the United States Environmental Protection Agency (EPA) and California Air Resources Board (CARB) have not yet adopted AAQS to regulate ultrafine particulates; therefore, South Coast AQMD has not developed thresholds for them.

Table 2 South Coast AQMD Regional Significance Thresholds

Air Pollutant	Construction Phase	Operational Phase
Reactive Organic Gases (ROGs)/ Volatile Organic Compounds (VOCs)	75 lbs/day	55 lbs/day
Nitrogen Oxides (NO_X)	100 lbs/day	55 lbs/day
Carbon Monoxide (CO)	550 lbs/day	550 lbs/day
Sulfur Oxides (SO_X)	150 lbs/day	150 lbs/day
Coarse Particulates (PM_{10})	150 lbs/day	150 lbs/day
Fine Particulates ($PM_{2.5}$)	55 lbs/day	55 lbs/day

Source: South Coast AQMD 2019.

Projects that exceed the regional significance threshold contribute to the nonattainment designation of the SoCAB. The attainment designations are based on the AAQS, which are set at levels of exposure that are determined to not result in adverse health. Exposure to fine particulate pollution and ozone causes myriad health impacts, particularly to the respiratory and cardiovascular systems:

- Linked to increased cancer risk ($PM_{2.5}$, toxic air contaminants [TACs])
- Aggravates respiratory disease (ozone [O_3], $PM_{2.5}$)
- Increases bronchitis (O_3, $PM_{2.5}$)
- Causes chest discomfort, throat irritation, and increased effort to take a deep breath (O_3)
- Reduces resistance to infections and increases fatigue (O_3)
- Reduces lung growth in children ($PM_{2.5}$)
- Contributes to heart disease and heart attacks ($PM_{2.5}$)
- Contributes to premature death (O_3, $PM_{2.5}$)
- Linked to lower birth weight in newborns ($PM_{2.5}$) (South Coast AQMD 2011a)

Exposure to fine particulates and ozone aggravates asthma attacks and can amplify other lung ailments such as emphysema and chronic obstructive pulmonary disease. Exposure to current levels of $PM_{2.5}$ is responsible for an estimated 4,300 cardiopulmonary-related deaths per year in the SoCAB. In addition, University of Southern California scientists responsible for a landmark children's health study found that lung growth improved as air pollution declined for children aged 11 to 15 in five communities in the SoCAB (South Coast AQMD 2015).

Mass emissions in Table 2 are not correlated with concentrations of air pollutants but contribute to the cumulative air quality impacts in the SoCAB. Therefore, regional emissions from a single project do not usually trigger a regional health impact. South Coast AQMD is the primary agency responsible for ensuring the health and welfare of individuals sensitive to elevated concentrations of air quality in the SoCAB. To achieve the health-based standards established by the EPA, South Coast AQMD prepares an air quality management plan (AQMP) that details regional programs to attain the AAQS.

CO HOTSPOTS

Areas of vehicle congestion have the potential to create pockets of CO called hot spots. These pockets have the potential to exceed the state one-hour standard of 20 parts per million (ppm) or the eight-hour standard of 9 ppm. Because CO is produced in greatest quantities from vehicle combustion and does not readily disperse into the atmosphere, adherence to ambient air quality standards is typically demonstrated through an analysis of localized CO concentrations. Hot spots are typically produced at intersections where traffic congestion is highest because vehicles queue for longer periods and are subject to reduced speeds. With the turnover of older vehicles, introduction of cleaner fuels, and implementation of control technology on industrial facilities, CO concentrations in the SoCAB and in the state have steadily declined.

In 2007, the SoCAB was designated in attainment for CO under both the California AAQS and National AAQS. The CO hotspot analysis conducted for attainment by South Coast AQMD did not predict a violation of CO standards at the busiest intersections in Los Angeles during the peak morning and afternoon periods.[2] As identified in South Coast AQMD's 2003 AQMP and the 1992 Federal Attainment Plan for Carbon Monoxide (1992 CO Plan), peak carbon monoxide concentrations in the SoCAB in previous years were a result of unusual meteorological and topographical conditions and not a result of congestion at a particular intersection (South Coast AQMD 1992, 2003). To generate a significant CO impact under existing and future vehicle emission rates, a project would have to increase traffic volumes at a single intersection by more than 44,000 vehicles per hour—or 24,000 vehicles per hour where vertical and/or horizontal air does not mix (BAAQMD 2017).[3]

LOCALIZED SIGNIFICANCE THRESHOLDS

South Coast AQMD developed LSTs for emissions of NO_2, CO, PM_{10}, and $PM_{2.5}$ generated at the project site (off-site mobile-source emissions are not included in the LST analysis). LSTs represent the maximum emissions at a project site that are not expected to cause or contribute to an exceedance of the most stringent federal or state AAQS and are shown in Table 3, *South Coast AQMD Localized Significance Thresholds*.

Table 3 South Coast AQMD Localized Significance Thresholds

Air Pollutant (Relevant AAQS)	Concentration

[2] The four intersections were: Long Beach Boulevard and Imperial Highway; Wilshire Boulevard and Veteran Avenue; Sunset Boulevard and Highland Avenue; and La Cienega Boulevard and Century Boulevard. The busiest intersection evaluated (Wilshire and Veteran) had a daily traffic volume of approximately 100,000 vehicles per day, with LOS E in the morning peak hour and LOS F in the evening peak hour.

[3] The CO hotspot analysis refers to the modeling conducted by the Bay Area Air Quality Management District (BAAQMD) for its 2017 CEQA Guidelines because it is based on newer data and considers the improvement in mobile-source CO emissions. Although meteorological conditions in the Bay Area differ from those in the Southern California region, the modeling conducted by BAAQMD demonstrates that the peak hour traffic volumes at an intersection in a single hour would need to be substantial. This finding is consistent with the CO hotspot analysis South Coast AQMD prepared as part of its 2003 AQMP to provide support in seeking CO attainment for the SoCAB. Based on the analysis prepared by South Coast AQMD, no CO hotspots were predicted for the SoCAB. As noted in the preceding footnote, the analysis included some of Los Angeles' busiest intersections, with daily traffic volumes of 100,000 or more daily vehicle trips operating at LOS E and F.

1-Hour CO Standard (CAAQS)	20 ppm
8-Hour CO Standard (CAAQS)	9.0 ppm
1-Hour NO_2 Standard (CAAQS)	0.18 ppm
Annual NO_2 Standard (CAAQS)	0.03 ppm
24-Hour PM_{10} Standard – Construction (South Coast AQMD)[1]	10.4 µg/m^3
24-Hour $PM_{2.5}$ Standard – Construction (South Coast AQMD)[1]	10.4 µg/m^3
24-Hour PM_{10} Standard – Operation (South Coast AQMD)[1]	2.5 µg/m^3
24-Hour $PM_{2.5}$ Standard – Operation (South Coast AQMD)[1]	2.5 µg/m^3

Source: South Coast AQMD 2019.
ppm – parts per million; µg/m^3 – micrograms per cubic meter
[1] Threshold is based on South Coast AQMD Rule 403. Since the SoCAB is in nonattainment for PM_{10} and $PM_{2.5}$, the threshold is established as an allowable change in concentration. Therefore, background concentration is irrelevant.

To assist lead agencies, South Coast AQMD developed screening-level LSTs to back-calculate the mass amount (lbs. per day) of emissions generated on-site that would trigger the levels shown in Table 3 for projects under 5 acres. These "screening-level" LSTs are the localized significance thresholds for all projects of 5 acres and less; however, they can be used as screening criteria for larger projects to determine whether dispersion modeling may be required in order to compare concentrations of air pollutants generated by the project to the localized concentrations shown in Table 3.

In accordance with South Coast AQMD's LST methodology, the screening-level construction LSTs are based on the acreage disturbed per day by equipment use. The screening-level construction LSTs for the project site in Source Receptor Area 3 (SRA 3), Southwest Coast LA County, are shown in Table 4, *South Coast AQMD Screening-Level Construction Localized Significance Thresholds*.

Table 4 South Coast AQMD Screening-Level Construction Localized Significance Thresholds

	Threshold (lbs/day)[1]			
Acreage Disturbed	Nitrogen Oxides (NO_X)[1]	Carbon Monoxide (CO)[1]	Coarse Particulates (PM_{10})[1, 2]	Fine Particulates ($PM_{2.5}$)[1, 2]
≤1.00 Acres Disturbed Per Day	91	664	5.00	3.00
1.88 Acres Disturbed Per Day	126	929	7.62	4.75
1.94 Acres Disturbed Per Day	129	948	7.81	4.87
2.00 Acres Disturbed Per Day	131	967	8.00	5.00

Source: South Coast AQMD 2008; South Coast AQMD 2011b, Based on receptors in SRA 3 – Southwest Coastal LA County.
Note: The LST Methodology uses lookup tables based on site acreage to determine emissions for CEQA purposes. The acreage disturbed is the maximum daily disturbed acreage determined using the equipment mix and hours of operation of each equipment for the different construction activities for this project.
[1] The screening-level LSTs shown in this table are interpolated on a per acre and distance basis based on the 1-, 2-, and 5-acre screening-level LSTs at the 25-, 50-, 100-, 200-, and 500-meter distances as assigned in the South Coast AQMD lookup tables (South Coast AQMD 2009a).
[2] Screening-level LSTs are based on receptors within 82 feet (25 meters) of the project site in SRA 3 . For purposes of this analysis, the senior assisted living facility currently being developed in the construction site north of the project site is considered as the nearest sensitive receptor.

Health Risk

Whenever a project would require use of chemical compounds that have been identified in South Coast AQMD Rule 1401, placed on CARB's air toxics list pursuant to Assembly Bill 1807, or placed on the EPA's National Emissions Standards for Hazardous Air Pollutants, a health risk assessment is required by the South

Coast AQMD. Table 5, *South Coast AQMD Toxic Air Contaminants Incremental Risk Thresholds*, lists the South Coast AQMD's TAC incremental risk thresholds for operation of a project.

Table 5 South Coast AQMD Toxic Air Contaminants Incremental Risk Thresholds

Maximum Incremental Cancer Risk	≥ 10 in 1 million
Cancer Burden (in areas ≥ 1 in 1 million)	> 0.5 excess cancer cases
Hazard Index (project increment)	≥ 1.0

Source: South Coast AQMD 2019.

The purpose of this environmental evaluation is to identify the significant effects of the proposed project on the environment, not the significant effects of the environment on the proposed project. (*California Building Industry Association v. Bay Area Air Quality Management District* (2015) 62 Cal.4th 369 (Case No. S213478).) CEQA does not require a CEQA-level environmental document to analyze the environmental effects of attracting development and people to an area.

The primary sources of potential air toxics associated with project operations include diesel particulate matter (DPM) from delivery trucks (e.g., truck traffic on local streets and idling on adjacent streets) and to a lesser extent facility operations (e.g., natural gas fired boilers). However, overall, residential land uses are not the types of land uses that generate a substantial number of trucks or a substantial amount of TAC emissions. Land uses that have the potential to generate substantial stationary sources of emissions include industrial projects that require a permit from South Coast AQMD, such as chemical processing, or warehousing projects where substantial truck idling could occur onsite (CARB 2005). Due to the type of land use proposed under the project, toxic or carcinogenic air pollutants are not expected to occur in any meaningful amounts in conjunction with operation of the proposed project. Therefore, an analysis of the projects operational TAC emissions is not warranted.

GREENHOUSE GAS EMISSIONS

The CEQA Guidelines recommend that a lead agency consider the following when assessing the significance of impacts from GHG emissions on the environment:

1. The extent to which the project may increase (or reduce) GHG emissions as compared to the existing environmental setting.
2. Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.
3. The extent to which the project complies with regulations or requirements adopted to implement an adopted statewide, regional, or local plan for the reduction or mitigation of GHG emissions.[4]

[4] The Governor's Office of Planning and Research recommendations include a requirement that such a plan must be adopted through a public review process and include specific requirements that reduce or mitigate the project's incremental contribution of GHG emissions. If there is substantial evidence that the possible effects of a particular project are still cumulatively considerable, notwithstanding compliance with the adopted regulations or requirements, an EIR must be prepared for the project.

South Coast Air Quality Management District

To provide guidance to local lead agencies on determining significance for GHG emissions in their CEQA documents, South Coast AQMD convened a GHG CEQA Significance Threshold Working Group. Based on the last Working Group meeting (Meeting No. 15) in September 2010, South Coast AQMD identified a tiered approach for evaluating GHG emissions for development projects where South Coast AQMD is not the lead agency (South Coast AQMD 2010a):

» Tier 1. If a project is exempt from CEQA, project-level and contribution to significant cumulative GHG emissions are less than significant.

» Tier 2. If the project complies with a GHG emissions reduction plan or mitigation program that avoids or substantially reduces GHG emissions in the project's geographic area (e.g., city or county), project-level and contribution to significant cumulative GHG emissions are less than significant.

» Tier 3. If GHG emissions are less than the screening-level threshold, project-level and contribution to significant cumulative GHG emissions are less than significant.

  For projects that are not exempt or where no qualifying GHG reduction plans are directly applicable, South Coast AQMD requires an assessment of GHG emissions. Project-related GHG emissions include on-road transportation, energy use, water use, wastewater generation, solid waste disposal, area sources, off-road emissions, and construction activities. The Working Group determined that because construction activities would result in a "one-time" net increase in GHG emissions, they should be amortized into the operational phase GHG emissions inventory based on the service life of a building. For buildings in general, it is reasonable to look at a 30-year time frame, since this is a typical interval before a new building requires the first major renovation. For projects where South Coast AQMD is not the lead agency, South Coast AQMD identified a screening-level threshold of 3,000 metric tons of CO_2 equivalence ($MTCO_2e$) annually for all land use types or the following land-use-specific thresholds: 1,400 $MTCO_2e$ for commercial projects, 3,500 $MTCO_2e$ for residential projects, or 3,000 $MTCO_2e$ for mixed-use projects. These bright-line thresholds are based on a review of the Governor's Office of Planning and Research database of CEQA projects. Based on a review of 711 CEQA projects, 90 percent of CEQA projects would exceed these bright-line thresholds. Therefore, projects that do not exceed the bright-line threshold would have a nominal, and therefore, less than cumulatively considerable impact on GHG emissions. South Coast AQMD recommends use of the 3,000 $MTCO_2e$ bright-line threshold for all project types (South Coast AQMD 2010b).

» Tier 4. If emissions exceed the screening threshold, a more detailed review of the project's GHG emissions is warranted.

  The South Coast AQMD Working Group identified an efficiency target for projects that exceed the screening threshold of 4.8 $MTCO_2e$ per year per service population ($MTCO_2e$/year/SP) for project-level analyses and 6.6 $MTCO_2e$/year/SP for plan level projects (e.g., program-level projects such as general plans) for the year 2020.[5] The per capita efficiency targets are based on the AB 32 GHG reduction target and 2020 GHG emissions inventory prepared for CARB's 2008 Scoping Plan.[6]

[5] It should be noted that the Working Group also considered efficiency targets for 2035 for the first time in this Working Group meeting.

[6] South Coast AQMD took the 2020 statewide GHG reduction target for land use only GHG emissions sectors and divided it by the 2020 statewide employment for the land use sectors to derive a per capita GHG efficiency metric that coincides with the GHG reduction targets of AB 32 for year 2020.

For purposes of this analysis, because the proposed project has an anticipated opening year post-2020, the bright-line screening-level criterion of 3,000 $MTCO_2e$/yr is used as the significance threshold for this project. Therefore, if the project operation-phase emissions exceed the 3,000 $MTCO_2e$/yr threshold, GHG emissions would be considered to substantially cumulatively contribute to statewide GHG emissions in the absence of reduction measures.

Environmental Impact

AIR QUALITY

a) Conflict with or obstruct implementation of the applicable air quality plan?

A consistency determination with the AQMP plays an important role in local agency project review by linking local planning and individual projects to the AQMP. It fulfills the CEQA goal of informing decision makers of the environmental efforts of the project under consideration early enough to ensure that air quality concerns are fully addressed. It also provides the local agency with ongoing information as to whether they are contributing to the clean air goals in the AQMP.

South Coast AQMD adopted the 2016 Air Quality Management Plan on March 3, 2017. Regional growth projections are used by South Coast AQMD to forecast future emission levels in the SoCAB. For southern California, these regional growth projections are provided by the Southern California Association of Governments (SCAG) and are partially based on land use designations included in city/county general plans. Thus, projects that are consistent with the local general plan are considered consistent with the air quality-related regional plan. Additionally, only large, regionally significant projects have the potential to affect the regional growth projections.

Changes in population, housing, or employment growth projections have the potential to affect SCAG's demographic projections and therefore the assumptions in South Coast AQMD's AQMP. The proposed residential land use would be consistent with the types of uses conditionally permitted under the "Del Amo Business Sub-District One" land use designation. Furthermore, only large, regionally significant projects have the potential to affect the regional growth projections. Section 15206(b) of the CEQA Guidelines states that a proposed residential project is of statewide, regional, or area-wide significance if it encompasses more than 500 dwelling units. The proposed project would develop a total of 200 dwelling units and would not be considered a project of statewide, regional, or area-wide significance that would require intergovernmental review under Section 15206 of the CEQA Guidelines. Thus, it would not have the potential to substantially affect the regional growth projections. Overall, because the proposed land use would be consistent with the land use designation of the project site, and because it would not be considered a project of statewide, regional, or area-wide significance, the proposed project would be consistent with the assumptions of the AQMP. Additionally, the long-term regional emissions generated by operation of the proposed project would be less than the South Coast AQMD emissions thresholds, and South Coast AQMD would not consider the project a substantial source of air pollutant emissions that would have the potential to affect the attainment designations in the SoCAB. Therefore, the project would not affect the regional emissions inventory or conflict with strategies in the AQMP and impacts would be less than significant.

b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

The following describes project-related impacts from short-term construction activities and long-term operation of the proposed project.

Construction

Construction activities would result in the generation of air pollutants. These emissions would primarily be 1) exhaust from off-road diesel-powered construction equipment; 2) dust generated by construction activities; 3) exhaust from on-road vehicles; and 4) off-gassing of volatile organic compounds (VOCs) from paints and asphalt.

Project construction would involve asphalt demolition, site preparation, grading, building construction, architectural coating, and paving. Construction is anticipated to take approximately 28 months, from August 2023 to December 2025. Construction emissions were estimated using CalEEMod 2020.4.0 and based on the preliminary construction duration provided by the Project Applicant and the CalEEMod default equipment mix. Construction emissions modeling is shown in Table 6, *Maximum Daily Regional Construction Emissions*.

Table 6 Maximum Daily Regional Construction Emissions

Construction Phase	Pollutants (lb/day)[1, 2]					
	VOC	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Year 2023						
Asphalt Demolition	2	17	15	<1	3	1
Site Preparation	1	16	10	<1	2	1
Grading	1	18	10	<1	4	2
Building Construction	3	16	23	<1	3	1
Year 2024						
Building Construction	2	15	23	<1	3	1
Year 2025						
Building Construction	2	15	22	<1	3	1
Building Construction and Architectural Coating Overlap	138	15	17	<1	1	1
Building Construction, Architectural Coating, and Paving/Finishing Overlap	139	22	30	<1	2	1
Paving/Finishing	1	7	12	<1	1	<1
Maximum Daily Construction Emissions						
Maximum Daily Emissions	**139**	21	41	<1	5	2
South Coast AQMD Regional Construction Threshold	**75**	**100**	**550**	**150**	**150**	**55**
Significant?	Yes	No	No	No	No	No

Source: CalEEMod Version 2020.4.0

[1] Based on the preliminary information provided or verified by the Project Applicant. Where specific information regarding project-related construction activities was not available, construction assumptions were based on CalEEMod defaults, which are based on construction surveys conducted by South Coast AQMD of construction equipment.

[2] Includes implementation of fugitive dust control measures required by South Coast AQMD under Rule 403, including watering disturbed areas a minimum of two times per day, reducing speed limit to 15 miles per hour on unpaved surfaces, replace ground cover, and street sweeping with Rule 1186–compliant sweepers.

As shown in the table, maximum daily emissions of VOC from project-related construction activities would exceed the South Coast AQMD regional significance threshold. The primary source of VOC emissions would be from the use of paints during architectural coating activities. However, as shown in Table 7, *Maximum Daily Regional Construction Emissions With Reduction Measure*, VOC emissions from project-related construction activities would be reduced to below the South Coast AQMD regional significance threshold with incorporation of Reduction Measure AQ-1, which would require use of paints with a VOC content of 25

grams per liter (g/L) or lower for the residential building, including the clubhouse and fitness center, and 50 g/L or lower for the parking structure. Therefore, the project-related construction activities would not exceed the South Coast AQMD thresholds, and impacts would be less than significant with incorporation of mitigation.

Table 7 Maximum Daily Regional Construction Emissions With Reduction Measure

Construction Phase	Pollutants (lb/day)[1, 2]					
	VOC	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Year 2023						
Asphalt Demolition	2	17	15	<1	3	1
Site Preparation	1	16	10	<1	2	1
Grading	1	18	10	<1	4	2
Building Construction	3	16	23	<1	3	1
Year 2024						
Building Construction	2	15	23	<1	3	1
Year 2025						
Building Construction	2	15	22	<1	3	1
Building Construction and Architectural Coating Overlap	71	15	17	<1	1	1
Building Construction, Architectural Coating, and Paving/Finishing Overlap	72	22	30	<1	2	1
Paving/Finishing	1	7	12	<1	1	<1
Maximum Daily Construction Emissions						
Maximum Daily Emissions	**72**	22	30	<1	4	2
South Coast AQMD Regional Construction Threshold	**75**	**100**	**550**	**150**	**150**	**55**
Significant?	No	No	No	No	No	No

Source: CalEEMod Version 2020.4.0.

[1] Based on the preliminary information provided or verified by the Project Applicant. Where specific information regarding project-related construction activities was not available, construction assumptions were based on CalEEMod defaults, which are based on construction surveys conducted by South Coast AQMD of construction equipment.

[2] Includes implementation of fugitive dust control measures required by South Coast AQMD under Rule 403, including watering disturbed areas a minimum of two times per day, reducing speed limit to 15 miles per hour on unpaved surfaces, replace ground cover, and street sweeping with Rule 1186–compliant sweepers. Also includes Reduction Measure AQ-1, which requires use of paints that have a VOC content of 25 g/L or less for the interior and exterior of the proposed residential building including the clubhouse and fitness center, and a VOC content of 50 g/L or less for the interior and exterior of the proposed parking structure.

REDUCTION MEASURE

AQ-1 During construction of the proposed project, the construction contractor(s) shall, at minimum, use paints with a volatile organic compound (VOC) content of 25 grams per liter (g/L) or less for all interior and exterior coatings of the proposed residential building, including the clubhouse and fitness center, and paints with a VOC content of 50 g/L or less for all interior and exterior coatings of the proposed parking structure. Prior to issuance of any construction permits, the VOC content requirements shall be noted on all construction management plans and architectural building plans and verified by the City of Torrance Planning Division.

Operation

Long-term air pollutant emissions associated with the proposed project include area sources (e.g., landscape fuel use, aerosols, architectural coatings, and asphalt pavement), energy use (i.e., natural gas use from cooling, heating, and cooking), and mobile sources (i.e., on-road vehicles). The primary source of long-term criteria air pollutant emissions generated by the proposed project would be mobile emissions from project-generated vehicle trips. As shown in Table 8, *Maximum Daily Regional Operational Phase Emissions*, air pollutant emissions generated from operation-related activities would be less than their respective South Coast AQMD regional significance threshold values. Therefore, regional air quality impacts associated with proposed project operations would be less than significant.

Table 8 Maximum Daily Regional Operational Phase Emissions

Source	Maximum Daily Emissions (lbs/day)—Winter or Summer					
	VOC	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Area	6	<1	17	<1	<1	<1
Energy[1]	<1	1	<1	<1	<1	<1
Mobile[2]	3	3	27	<1	7	2
Total Emissions	**9**	**3**	**44**	**<1**	**7**	**2**
South Coast AQMD Regional Threshold	**55**	**55**	**550**	**150**	**150**	**55**
Exceeds Regional Threshold?	No	No	No	No	No	No

Source: CalEEMod Version 2020.4.0.
Notes: Highest winter or summer emissions. Totals may not add up to 100 percent due to rounding.
[1] Utilizes CalEEMod default energy rates, which are based on the 2019 Building Energy Efficiency Standards.
[2] Based on trip generation data provided by LLG (see Appendix D).

c) Expose sensitive receptors to substantial pollutant concentrations?

The proposed project could expose sensitive receptors to elevated pollutant concentrations if it causes or significantly contributes to elevated pollutant concentration levels. Unlike regional emissions, localized emissions are typically evaluated in terms of air concentration rather than mass so they can be more readily correlated to potential health effects.

Construction Phase

CONSTRUCTION LSTS

Localized significance thresholds are based on the California AAQS, which are the most stringent AAQS to provide a margin of safety in the protection of public health and welfare. They are designated to protect sensitive receptors most susceptible to further respiratory distress, such as asthmatics, the elderly, very young children, people already weakened by other disease or illness, and people engaged in strenuous work or exercise. Screening-level LSTs are the amount of project-related emissions at which localized concentrations (ppm or $\mu g/m^3$) could exceed the AAQS for criteria air pollutants for which the SoCAB is

designated nonattainment. They are based on the size of the area disturbed, distance to the nearest sensitive receptor, and SRA. The nearest existing off-site residential sensitive receptor are the single-family residences approximately 140 feet southwest of the project site. Other nearby sensitive receptors include the single-family residences 280 feet to the west along Ocean Avenue. In addition, there will be a senior assisted living facility within 82 feet north of the project site.

Table 9, *Localized Construction Emissions,* show that the maximum daily on-site construction emissions (pounds per day) for NO_x, CO, PM_{10}, and $PM_{2.5}$ would be less than their respective South Coast AQMD screening-level LSTs. Therefore, project-related construction activities would not expose sensitive receptors to substantial criteria air pollutant concentrations and impacts would be less than significant.

Table 9 Localized Construction Emissions

Construction Activity	Pollutants(lbs/day)[1]			
	NO_X	CO	PM_{10}[2]	$PM_{2.5}$[2]
Building Construction – Year 2023	14	14	0.61	0.59
Building Construction – Year 2024	12	14	0.54	0.52
Building Construction – Year 2025	12	14	0.47	0.45
Building Construction & Architectural Coating Overlap – Year 2025	15	16	0.67	0.64
Building Construction, Architectural Coating, & Paving Overlap – Year 2025	22	28	1.02	0.96
Paving	7	12	0.35	0.32
1.00 Acre or Less Screening-Level LST[3]	**91**	**664**	**5.00**	**3.00**
Exceeds LST?	No	No	No	No
Grading	14	9	3.64	2.02
1.88-Acre Screening-Level LST	**126**	**929**	**7.62**	**4.75**
Exceeds LST?	No	No	No	No
Site Preparation	14	10	1.23	0.57
1.94-Acre Screening-Level LST	**129**	**948**	**7.81**	**4.87**
Exceeds LST?	No	No	No	No
Demolition	14	13	2	1
2.00-Acre Screening-Level LST	**131**	**967**	**8.00**	**5.00**
Exceeds LST?	No	No	No	No

Source: CalEEMod Version 2020.4.0. South Coast AQMD 2008 and 2011b.

Notes: In accordance with South Coast AQMD methodology, only on-site stationary sources and mobile equipment are included in the analysis. Screening-level LSTs are based on receptors within 82 feet (25 meters) of the project site in SRA 3. Additionally, the referenced area (acre) for each screening-level LST shown is generally based on the construction equipment mix and daily hours of operation of each equipment for a construction activity.

1 Based on the preliminary information provided by the applicant. Where specific information for project-related construction activities or processes was not available, modeling was based on CalEEMod defaults. These defaults are based on construction surveys conducted by the South Coast AQMD.

2 Includes fugitive dust control measures required by South Coast AQMD under Rule 403, such as watering disturbed areas a minimum of two times per day, reducing speed limit to 15 miles per hour on unpaved surfaces, replace ground cover, and street sweeping with Rule 1186–compliant sweepers.

CONSTRUCTION HEALTH RISK

South Coast AQMD currently does not require health risk assessments for short-term emissions from construction equipment. Emissions from construction equipment primarily consist of diesel particulate matter (DPM). The Office of Environmental Health Hazard Assessment (OEHHA) adopted new guidance for the preparation of health risk assessments in March 2015 (OEHHA 2015). OEHHA has developed a cancer risk factor and noncancer chronic reference exposure level for DPM, but these factors are based on

continuous exposure over a 30-year time frame. No short-term acute exposure levels have been developed for DPM. South Coast AQMD currently does not require the evaluation of long-term excess cancer risk or chronic health impacts for a short-term project. The proposed project site would be developed in approximately 28 months. The relatively short duration when compared to a 30-year time frame would limit exposures of on-site and off-site receptors. In addition, exhaust emissions from off-road vehicles associated with overall project-related construction activities would not exceed the screening-level LSTs. Therefore, project-related construction activities would not expose sensitive receptors to substantial TAC concentrations and impacts would be less than significant.

Operational Phase

LOCALIZED OPERATION-PHASE IMPACTS

Operation of the proposed project would not generate substantial quantities of emissions from on-site, stationary sources. Land uses that have the potential to generate substantial stationary sources of emissions that would require a permit from South Coast AQMD include industrial land uses, such as chemical processing and warehousing operations where substantial truck idling could occur on-site. The proposed project does not fall within these categories of uses. While operation of the proposed project could result in the use of standard on-site mechanical equipment such as heating, ventilation, and air conditioning units in addition to occasional use of landscaping equipment for project site maintenance, air pollutant emissions generated from these sources would be nominal (see Area and Energy source emissions in Table 8). Therefore, on-site emissions generated from operation of the proposed project would not expose off-site sensitive receptors to substantial pollutant concentrations and impacts would be less than significant.

CO HOTSPOTS

Areas of vehicle congestion have the potential to create pockets of CO called hot spots. These pockets have the potential to exceed the state one-hour standard of 20 parts per million (ppm) or the eight-hour standard of 9.0 ppm. Because CO is produced in greatest quantities from vehicle combustion and does not readily disperse into the atmosphere, adherence to AAQS is typically demonstrated through an analysis of localized CO concentrations, typically produced at intersections where vehicles queue for longer periods and are subject to reduced speeds. The SoCAB has been designated as attainment under both the national and California AAQS for CO. Under existing and future vehicle emission rates, a project would have to increase traffic volumes at a single intersection by more than 44,000 vehicles per hour—or 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited—in order to generate a significant CO impact (BAAQMD 2017).

Operation of the proposed project would generate up to a total of 78 peak hour vehicle trips during the midday and PM peak hours and would be minimal compared to the AAQS screening levels (see Appendix D). Overall, under project opening year conditions, the highest number of peak hour trips for intersections within the traffic study area would be 7,073 PM peak trips at the intersection of Hawthorne Boulevard and Sepulveda Boulevard (see Appendix D). Therefore, development and operation of the proposed project would not result in the volume of traffic required (i.e., 24,000 to 44,000 peak hour vehicle trips) to generate a CO hotspot at intersections within the project traffic study area and impacts would be less than significant.

d) Create objectionable odors affecting a substantial number of people?

The threshold for odor is if a project creates an odor nuisance pursuant to South Coast AQMD Rule 402, Nuisance, which states:

> A person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property. The provisions of this rule shall not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowl or animals.

The type of facilities that are considered to have objectionable odors include wastewater treatments plants, compost facilities, landfills, solid waste transfer stations, fiberglass manufacturing facilities, paint/coating operations (e.g., auto body shops), dairy farms, petroleum refineries, asphalt batch plants, chemical manufacturing, and food manufacturing facilities. The proposed residential land use would not result in the types of odors generated by the aforementioned land uses. Additionally, emissions from construction equipment, such as diesel exhaust and volatile organic compounds from architectural coatings and paving activities, may also generate odors. However, these odors would be low in concentration, temporary, and are not expected to affect a substantial number of people.

GREENHOUSE GAS EMISSIONS

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Global climate change is not confined to a project area and is generally accepted as the consequence of global industrialization over the last 200 years. A typical project, even a very large one, does not generate enough greenhouse gas emissions on its own to influence global climate change significantly; hence, the issue of global climate change is, by definition, a cumulative environmental impact.

The proposed project would generate GHG emissions from vehicle trips generated by the project; energy use (indirectly from purchased electricity use and directly through fuel consumed for building heating); area sources (e.g., equipment used on-site, consumer products, coatings); water/wastewater generation; and waste disposal. The project's annual GHG emissions were calculated for construction and operation of the project. Annual project-related construction emissions were amortized over 30 years and included in the emissions inventory to account for GHG emissions from the construction phase of the project. The project-related GHG emissions are shown in Table 10, *Project-Related GHG Emissions*. As shown in the table, the primary sources of GHG emissions are mobile sources. Overall, the proposed project would generate 1,594 $MTCO_2e$/yr of GHG emissions annually and would not exceed the bright-line screening threshold of 3,000 $MTCO_2e$/yr. Therefore, GHG emissions generated by the project are not considered to cumulatively contribute to statewide GHG emissions and impacts would be less than significant.

Table 10 Project-Related GHG Emissions

Source	Project GHG Emissions ($MTCO_2e$/Year)	Percent of Project Total $MTCO_2e$/Year
Area	4	<1%
Energy[1]	466	29%
Mobile[2]	978	61%
Waste	46	3%
Water	51	3%

Table 10 Project-Related GHG Emissions

Source	Project GHG Emissions ($MTCO_2e$/Year)	Percent of Project Total $MTCO_2e$/Year
Amortized Construction Emissions[3]	49	3%
Total	1,594	**100%**
South Coast AQMD's Bright-Line Threshold	3,000	NA
Exceeds Bright-Line Threshold	No	NA

Source: CalEEMod, Version 2020.4.0. Totals may not equal the sum of the values as shown due to rounding
[1] Utilizes CalEEMod default energy rates, which are based on the 2019 Building Energy Efficiency Standards.
[2] Transportation emissions based on trip generation data provided by LLG (see Appendix D).
[3] Total construction emissions are amortized over 30 years based on recommended South Coast AQMD methodology (South Coast AQMD 2009b).

b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Applicable plans adopted for the purpose of reducing GHG emissions include the CARB Scoping Plan and SCAG's Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). A consistency analysis with these plans is presented below.

CARB Scoping Plan

The CARB Scoping Plan is California's GHG reduction strategy to achieve the state's GHG emissions reduction target established by AB 32, which is to return to 1990 emission levels by year 2020, and SB 32, which is to reduce emissions 40 percent below 1990 levels by 2030 (CARB 2017). The Scoping Plan is applicable to state agencies and is not directly applicable to cities/counties and individual projects. Nonetheless, the Scoping Plan has been the primary tool that is used to develop performance-based and efficiency-based CEQA criteria and GHG reduction targets for climate action planning efforts.

Since adoption of the Scoping Plan, state agencies have adopted programs identified in the plan, and the legislature has passed additional legislation to achieve the GHG reduction targets. Statewide strategies to reduce GHG emissions include the Low Carbon Fuel Standard, California Appliance Energy Efficiency regulations, California Renewable Energy Portfolio standard, changes in the Corporate Average Fuel Economy standards, and other early action measures as necessary to ensure the state is on target to achieve the GHG emissions reduction goals of AB 32 and SB 32. Also, new buildings are required to comply with the current Building Energy Efficiency Standards and California Green Building Code. While measures in the Scoping Plan apply to state agencies and not the proposed project, the project's GHG emissions would be reduced from implementation and compliance with statewide measures that have been adopted since AB 32 and SB 32 were adopted. Therefore, the proposed project would not obstruct implementation of the CARB Scoping Plan.

SCAG's Regional Transportation Plan/Sustainable Communities Strategy

SCAG adopted the 2020-2045 RTP/SCS (Connect SoCal) in September 2020. Connect SoCal found that land use strategies that focus on new housing and job growth in areas rich with destinations and mobility options are consistent with a land use development pattern that supports and complements the proposed transportation network. The overarching strategy in Connect SoCal is to plan for the southern California region to grow in more compact communities in transit priority areas and priority growth areas; provide

neighborhoods with efficient and plentiful public transit; establish abundant and safe opportunities to walk, bike, and pursue other forms of active transportation; and preserve more of the region's remaining natural lands and farmlands (SCAG 2020). Connect SoCal's transportation projects help more efficiently distribute population, housing, and employment growth, and forecast development is generally consistent with regional-level general plan data to promote active transportation and reduce GHG emissions. The projected regional development, when integrated with the proposed regional transportation network in Connect SoCal, would reduce per-capita GHG emissions related to vehicular travel and achieve the GHG reduction per-capita targets for the SCAG region.

The Connect SoCal Plan does not require that local general plans, specific plans, or zoning be consistent with the SCS, but provides incentives for consistency to governments and developers. The proposed project would result in an infill, multifamily residential development. Implementation of the proposed project would provide more housing options and potentially closer housing options for people who work in the City of Torrance. The proposed project would also include six short-term bicycle parking spaces and is within 500 feet of the Hawthorn Boulevard / West Carson Street intersection, which includes 13 transit stops for the Torrance Transit System and the Metro. In addition, as discussed in the AQMP consistency analysis, the proposed project would not be considered a regionally significant project and would not directly induce substantial population growth. Furthermore, based on the Vehicle Miles Traveled (VMT) Screening Assessment and the City of Torrance Traffic Impact Assessment Guidelines for Land Use Projects, the proposed project is assumed to have no significant VMT impacts (LLG 2022). Therefore, the proposed project would not interfere with SCAG's ability to implement the regional strategies outlined in the Connect SoCal Plan.

City of Torrance Climate Action Plan

The City, in coordination with the South Bay Cities Council of Governments (SBCCOG), developed a climate action plan (CAP) to reduce GHG emissions in the city and thereby reduce the City's contribution to global climate change concerns (City of Torrance and SBCCOG 2017). The CAP is not a Qualified GHG Emissions Reduction Plan under CEQA per the requirements outlined in the CEQA Guidelines, Section 15183.5(D); therefore, no CEQA document can tier from the City CAP. However, an evaluation of project consistency to the general strategies of the CAP is provided.

The City CAP includes GHG reduction strategies in the sectors of land use and transportation, energy efficiency, solid waste, urban greening, and energy generation and storage to reach the City's GHG reduction targets (Torrance and SBCCOG 2017), The proposed project would be a high-density infill residential development near residential, commercial, and retail uses. It would also provide a designated co-work space to accommodate work from home. This aspect and feature of the proposed project could contribute to reducing vehicle trips or distance traveled by automobile. As stated previously, the proposed project is assumed to have no VMT impacts. In addition, the proposed parking structure would include 44 EV chargers, which would support the transition to electric vehicles. Furthermore, the proposed project would install energy-efficient appliances and water-conserving fixtures. The proposed project would also include rooftop landscaping and landscaping trees around the perimeter of the project site and within the proposed inner courtyards, which would replace the existing trees that would be removed. Additionally, the private waste hauler that would provide service to the project would be required to provide information on recycling and waste reduction to the residents, as stated in the Torrance Municipal Code Section 43.7.1. Overall, as outlined above, the proposed project would generally be consistent with the intent and strategies of the City CAP.

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Appendix A – Emissions Summary

Regional Construction Emissions Worksheet - Unmitigated

*CalEEMod, Version 2020.4.0

Demolition

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	**2023 Summer**						
	Fugitive Dust					1.6517	0.2501
	Off-Road	1.4725	14.3184	13.4577	0.0241	0.6766	0.6328
	Total	**1.4725**	**14.3184**	**13.4577**	**0.0241**	**2.3284**	**0.8829**
Offsite							
	Hauling	0.0387	2.3271	0.6211	0.0104	0.3056	0.0944
	Vendor	4.61E-03	0.1535	0.0595	7.40E-04	0.0248	7.71E-03
	Worker	0.0416	0.029	0.4698	1.29E-03	0.1348	0.0366
	Total	**0.0849**	**2.5096**	**1.1504**	**0.0125**	**0.4652**	**0.1387**
TOTAL		***1.56***	***16.83***	***14.61***	***0.04***	***2.79***	***1.02***
Onsite	**2023 Winter**						
	Fugitive Dust					1.6517	0.2501
	Off-Road	1.4725	14.3184	13.4577	0.0241	0.6766	0.6328
	Total	**1.4725**	**14.3184**	**13.4577**	**0.0241**	**2.3284**	**0.8829**
Offsite							
	Hauling	0.0362	2.4297	0.6297	0.0104	0.3057	0.0945
	Vendor	4.45E-03	0.1608	0.0614	7.50E-04	0.0248	7.72E-03
	Worker	0.0447	0.032	0.4318	1.22E-03	0.1348	0.0366
	Total	**0.0853**	**2.6225**	**1.1228**	**0.0124**	**0.4652**	**0.1387**
TOTAL		***1.56***	***16.94***	***14.58***	***0.04***	***2.79***	***0.92***
Onsite	**2023**						
	Fugitive Dust	0.00	0.00	0.00	0.00	1.65	0.25
	Off-Road	1.47	14.32	13.46	0.02	0.68	0.63
	Total	**1.47**	**14.32**	**13.46**	**0.02**	**2.33**	**0.88**
Offsite							
	Hauling	0.04	2.43	0.63	0.01	0.31	0.09
	Vendor	0.00	0.16	0.06	0.00	0.02	0.01
	Worker	0.04	0.03	0.47	0.00	0.13	0.04
	Total	**0.09**	**2.62**	**1.15**	**0.01**	**0.47**	**0.14**
TOTAL		***1.56***	***16.94***	***14.61***	***0.04***	***2.79***	***1.02***

Site Preparation

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	**2023 Summer**						
	Fugitive Dust					0.6831	0.0739
	Off-Road	1.3027	14.2802	9.782	0.0245	0.5419	0.4985
	Total	**1.3027**	**14.2802**	**9.782**	**0.0245**	**1.225**	**0.5724**
Offsite							
	Hauling	0.0168	1.0113	0.2699	4.53E-03	0.1328	0.041
	Vendor	0.0115	0.3838	0.1487	1.86E-03	0.0619	0.0193
	Worker	0.0256	0.0179	0.2891	7.90E-04	0.083	0.0225
	Total	**0.0539**	**1.413**	**0.7077**	**7.18E-03**	**0.2777**	**0.0828**
TOTAL		***1.36***	***15.69***	***10.49***	***0.03***	***1.50***	***0.66***

Onsite		**2023 Winter**					
	Fugitive Dust					0.6831	0.0739
	Off-Road	1.3027	14.2802	9.782	0.0245	0.5419	0.4985
	Total	**1.3027**	**14.2802**	**9.782**	**0.0245**	**1.225**	**0.5724**
Offsite							
	Hauling	0.0157	1.0559	0.2736	4.54E-03	0.1328	0.0411
	Vendor	0.0111	0.4019	0.1534	1.86E-03	0.0619	0.0193
	Worker	0.0275	0.0197	0.2658	7.50E-04	0.083	0.0225
	Total	**0.0544**	**1.4775**	**0.6928**	**7.15E-03**	**0.2777**	**0.0828**
TOTAL		***1.36***	***15.76***	***10.47***	***0.03***	***1.50***	***0.59***

Onsite		**2023**					
	Fugitive Dust	0.00	0.00	0.00	0.00	0.68	0.07
	Off-Road	1.30	14.28	9.78	0.02	0.54	0.50
	Total	**1.30**	**14.28**	**9.78**	**0.02**	**1.23**	**0.57**
Offsite							
	Hauling	0.02	1.06	0.27	0.00	0.13	0.04
	Vendor	0.01	0.40	0.15	0.00	0.06	0.02
	Worker	0.03	0.02	0.29	0.00	0.08	0.02
	Total	**0.05**	**1.48**	**0.71**	**0.01**	**0.28**	**0.08**
TOTAL		***1.36***	***15.76***	***10.49***	***0.03***	***1.50***	***0.66***

Grading

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		**2023 Summer**					
	Fugitive Dust					3.0366	1.4654
	Off-Road	1.333	14.4676	8.7038	0.0206	0.6044	0.556
	Total	**1.333**	**14.4676**	**8.7038**	**0.0206**	**3.6409**	**2.0214**
Offsite							
	Hauling	0.0492	2.9592	0.7898	0.0133	0.3886	0.1201
	Vendor	0.0115	0.3838	0.1487	1.86E-03	0.0619	0.0193
	Worker	0.032	0.0223	0.3614	9.90E-04	0.1037	0.0281
	Total	**0.0927**	**3.3654**	**1.2999**	**0.0161**	**0.5542**	**0.1675**
TOTAL		***1.43***	***17.83***	***10.00***	***0.04***	***4.20***	***2.19***

Onsite		**2023 Winter**					
	Fugitive Dust					3.0366	1.4654
	Off-Road	1.333	14.4676	8.7038	0.0206	0.6044	0.556
	Total	**1.333**	**14.4676**	**8.7038**	**0.0206**	**3.6409**	**2.0214**
Offsite							
	Hauling	0.046	3.0897	0.8007	0.0133	0.3887	0.1201
	Vendor	0.0111	0.4019	0.1534	1.86E-03	0.0619	0.0193
	Worker	0.0344	0.0246	0.3322	9.40E-04	0.1037	0.0281
	Total	**0.0915**	**3.5162**	**1.2863**	**0.0161**	**0.5543**	**0.1675**
TOTAL		***1.42***	***17.98***	***9.99***	***0.04***	***4.20***	***2.05***

Onsite		**2023**					
	Fugitive Dust	0.00	0.00	0.00	0.00	3.04	1.47
	Off-Road	1.33	14.47	8.70	0.02	0.60	0.56
	Total	**1.33**	**14.47**	**8.70**	**0.02**	**3.64**	**2.02**
Offsite							
	Hauling	0.05	3.09	0.80	0.01	0.39	0.12
	Vendor	0.01	0.40	0.15	0.00	0.06	0.02
	Worker	0.03	0.02	0.36	0.00	0.10	0.03
	Total	**0.09**	**3.52**	**1.30**	**0.02**	**0.55**	**0.17**
TOTAL		***1.43***	***17.98***	***10.00***	***0.04***	***4.20***	***2.19***

Building Construction

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	**2023 Summer**						
	Off-Road	1.7136	13.6239	14.2145	0.025	0.6136	0.588
	Total	**1.7136**	**13.6239**	**14.2145**	**0.025**	**0.6136**	**0.588**
Offsite							
	Hauling	0	0	0	0	0	0
	Vendor	0.0622	2.0727	0.803	0.0101	0.3341	0.1041
	Worker	0.7297	0.5087	8.2399	0.0226	2.3644	0.641
	Total	**0.7918**	**2.5814**	**9.0429**	**0.0326**	**2.6986**	**0.7452**
TOTAL		***2.51***	***16.21***	***23.26***	***0.06***	***3.31***	***1.33***
Onsite	**2023 Winter**						
	Off-Road	1.7136	13.6239	14.2145	0.025	0.6136	0.588
	Total	**1.7136**	**13.6239**	**14.2145**	**0.025**	**0.6136**	**0.588**
Offsite							
	Hauling	0	0	0	0	0	0
	Vendor	0.06	2.1701	0.8282	0.0101	0.3342	0.1042
	Worker	0.784	0.5619	7.5738	0.0214	2.3644	0.641
	Total	**0.844**	**2.732**	**8.402**	**0.0314**	**2.6986**	**0.7452**
TOTAL		***2.56***	***16.36***	***22.62***	***0.06***	***3.31***	***1.33***
Onsite	**2023**						
	Off-Road	1.71	13.62	14.21	0.03	0.61	0.59
	Total	**1.71**	**13.62**	**14.21**	**0.03**	**0.61**	**0.59**
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.06	2.17	0.83	0.01	0.33	0.10
	Worker	0.78	0.56	8.24	0.02	2.36	0.64
	Total	**0.84**	**2.73**	**9.04**	**0.03**	**2.70**	**0.75**
TOTAL		***2.56***	***16.36***	***23.26***	***0.06***	***3.31***	***1.33***

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	**2024 Summer**						
	Off-Road	1.5971	12.8235	14.1002	0.025	0.5381	0.5153
	Total	**1.5971**	**12.8235**	**14.1002**	**0.025**	**0.5381**	**0.5153**
Offsite							
	Hauling	0	0	0	0	0	0
	Vendor	0.0603	2.0769	0.7859	9.89E-03	0.3342	0.1042
	Worker	0.6798	0.454	7.6568	0.0219	2.3638	0.6404
	Total	**0.7401**	**2.5309**	**8.4427**	**0.0318**	**2.698**	**0.7446**
TOTAL		***2.34***	***15.35***	***22.54***	***0.06***	***3.24***	***1.26***
Onsite	**2024 Winter**						
	Off-Road	1.5971	12.8235	14.1002	0.025	0.5381	0.5153
	Total	**1.5971**	**12.8235**	**14.1002**	**0.025**	**0.5381**	**0.5153**
Offsite							

	Hauling	0	0	0	0	0	0
	Vendor	0.058	2.1745	0.8108	9.91E-03	0.3343	0.1043
	Worker	0.7328	0.5014	7.0441	0.0208	2.3638	0.6404
	Total	**0.7909**	**2.6759**	**7.8549**	**0.0307**	**2.6981**	**0.7447**
TOTAL		***2.39***	***15.50***	***21.96***	***0.06***	***3.24***	***1.26***
Onsite	**2024**						
	Off-Road	1.60	12.82	14.10	0.03	0.54	0.52
	Total	**1.60**	**12.82**	**14.10**	**0.03**	**0.54**	**0.52**
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.06	2.17	0.81	0.01	0.33	0.10
	Worker	0.73	0.50	7.66	0.02	2.36	0.64
	Total	**0.79**	**2.68**	**8.44**	**0.03**	**2.70**	**0.74**
TOTAL		***2.39***	***15.50***	***22.54***	***0.06***	***3.24***	***1.26***

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	**2025 Summer**						
	Off-Road	1.4897	12.0233	14.0072	0.025	0.47	0.4498
	Total	**1.4897**	**12.0233**	**14.0072**	**0.025**	**0.47**	**0.4498**
Offsite							
	Hauling	0	0	0	0	0	0
	Vendor	0.0586	2.0671	0.7715	9.70E-03	0.3343	0.1042
	Worker	0.6355	0.4077	7.1211	0.0212	2.3631	0.6398
	Total	**0.694**	**2.4748**	**7.8926**	**0.0309**	**2.6973**	**0.744**
TOTAL		***2.18***	***14.50***	***21.90***	***0.06***	***3.17***	***1.19***
Onsite	**2025 Winter**						
	Off-Road	1.4897	12.0233	14.0072	0.025	0.47	0.4498
	Total	**1.4897**	**12.0233**	**14.0072**	**0.025**	**0.47**	**0.4498**
Offsite							
	Hauling	0	0	0	0	0	0
	Vendor	0.0563	2.1644	0.7961	9.72E-03	0.3343	0.1043
	Worker	0.6873	0.4501	6.5563	0.0201	2.3631	0.6398
	Total	**0.7436**	**2.6145**	**7.3524**	**0.0298**	**2.6974**	**0.7441**
TOTAL		***2.23***	***14.64***	***21.36***	***0.05***	***3.17***	***1.19***
Onsite	**2025**						
	Off-Road	1.49	12.02	14.01	0.03	0.47	0.45
	Total	**1.49**	**12.02**	**14.01**	**0.03**	**0.47**	**0.45**
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00

	Vendor	0.06	2.16	0.80	0.01	0.33	0.10
	Worker	0.69	0.45	7.12	0.02	2.36	0.64
	Total	**0.74**	**2.61**	**7.89**	**0.03**	**2.70**	**0.74**
TOTAL		***2.23***	***14.64***	***21.90***	***0.06***	***3.17***	***1.19***

Architectural Coating

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	**2025 Summer**						
	Archit. Coating	136.2294				0	0
	Off-Road	0.1709	1.1455	1.8091	2.97E-03	0.0515	0.0515
	Total	**136.4003**	**1.1455**	**1.8091**	**2.97E-03**	**0.0515**	**0.0515**
Offsite							
	Hauling	0	0	0	0	0	0
	Vendor	0	0	0	0	0	0
	Worker	0.1282	0.0823	1.4367	4.27E-03	0.4768	0.1291
	Total	**0.1282**	**0.0823**	**1.4367**	**4.27E-03**	**0.4768**	**0.1291**
TOTAL		***136.53***	***1.23***	***3.25***	***0.01***	***0.53***	***0.18***
Onsite	**2025 Winter**						
	Archit. Coating	136.2294				0	0
	Off-Road	0.1709	1.1455	1.8091	2.97E-03	0.0515	0.0515
	Total	**136.4003**	**1.1455**	**1.8091**	**2.97E-03**	**0.0515**	**0.0515**
Offsite							
	Hauling	0	0	0	0	0	0
	Vendor	0	0	0	0	0	0
	Worker	0.1387	0.0908	1.3228	4.05E-03	0.4768	0.1291
	Total	**0.1387**	**0.0908**	**1.3228**	**4.05E-03**	**0.4768**	**0.1291**
TOTAL		***136.54***	***1.24***	***3.13***	***0.01***	***0.53***	***0.18***

Onsite	**2025**						
	Archit. Coating	136.23	0.00	0.00	0.00	0.00	0.00
	Off-Road	0.17	1.15	1.81	0.00	0.05	0.05
	Total	**136.40**	**1.15**	**1.81**	**0.00**	**0.05**	**0.05**
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.14	0.09	1.44	0.00	0.48	0.13
	Total	**0.14**	**0.09**	**1.44**	**0.00**	**0.48**	**0.13**
TOTAL		***136.54***	***1.24***	***3.25***	***0.01***	***0.53***	***0.18***
Building Construction & Architectural Coating		**138.25**	**14.86**	**17.46**	**0.03**	**1.14**	**0.77**

Paving

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	**2025 Summer**						
	Off-Road	0.7854	7.4371	11.6737	0.0179	0.3503	0.3234
	Paving	0.0561				0	0
	Total	**0.8416**	**7.4371**	**11.6737**	**0.0179**	**0.3503**	**0.3234**
Offsite							
	Hauling	0	0	0	0	0	0
	Vendor	0	0	0	0	0	0
	Worker	0.0418	0.0268	0.4685	1.39E-03	0.1555	0.0421
	Total	**0.0418**	**0.0268**	**0.4685**	**1.39E-03**	**0.1555**	**0.0421**
TOTAL							
Onsite	**2025 Winter**						
	Off-Road	0.7854	7.4371	11.6737	0.0179	0.3503	0.3234
	Paving	0.0561				0	0

	Total	**0.8416**	**7.4371**	**11.6737**	**0.0179**	**0.3503**	**0.3234**
Offsite							
	Hauling	0	0	0	0	0	0
	Vendor	0	0	0	0	0	0
	Worker	0.0452	0.0296	0.4313	1.32E-03	0.1555	0.0421
	Total	**0.0452**	**0.0296**	**0.4313**	**1.32E-03**	**0.1555**	**0.0421**
TOTAL		***0.89***	***7.47***	***12.11***	***0.02***	***0.51***	***0.37***
Onsite	**2025**						
	Off-Road	0.79	7.44	11.67	0.02	0.35	0.32
	Paving	0.06	0.00	0.00	0.00	0.00	0.00
	Total	**0.84**	**7.44**	**11.67**	**0.02**	**0.35**	**0.32**
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.05	0.03	0.47	0.00	0.16	0.04
	Total	**0.05**	**0.03**	**0.47**	**0.00**	**0.16**	**0.04**
TOTAL		***0.89***	***7.47***	***12.14***	***0.02***	***0.51***	***0.37***
Building Consstruction, Architectural Coating, & Paving		**139.14**	**22.33**	**29.60**	**0.05**	**1.65**	**1.13**
MAX DAILY		**139**	**22**	**30**	**0.06**	**4**	**2**
Regional Thresholds		**75**	**100**	**550**	**150**	**150**	**55**
Exceeds Thresholds?		Yes	No	No	No	No	No

Regional Construction Emissions Worksheet - Mitigated

*CalEEMod, Version 2020.4.0

Demolition

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	**2023 Summer**						
	Fugitive Dust					1.6517	0.2501
	Off-Road	1.4725	14.3184	13.4577	0.0241	0.6766	0.6328
	Total	**1.4725**	**14.3184**	**13.4577**	**0.0241**	**2.3284**	**0.8829**
Offsite							
	Hauling	0.0387	2.3271	0.6211	0.0104	0.3056	0.0944
	Vendor	4.61E-03	0.1535	0.0595	7.40E-04	0.0248	7.71E-03
	Worker	0.0416	0.029	0.4698	1.29E-03	0.1348	0.0366
	Total	**0.0849**	**2.5096**	**1.1504**	**0.0125**	**0.4652**	**0.1387**
TOTAL		***1.56***	***16.83***	***14.61***	***0.04***	***2.79***	***1.02***
Onsite	**2023 Winter**						
	Fugitive Dust					1.6517	0.2501
	Off-Road	1.4725	14.3184	13.4577	0.0241	0.6766	0.6328
	Total	**1.4725**	**14.3184**	**13.4577**	**0.0241**	**2.3284**	**0.8829**
Offsite							
	Hauling	0.0362	2.4297	0.6297	0.0104	0.3057	0.0945
	Vendor	4.45E-03	0.1608	0.0614	7.50E-04	0.0248	7.72E-03
	Worker	0.0447	0.032	0.4318	1.22E-03	0.1348	0.0366
	Total	**0.0853**	**2.6225**	**1.1228**	**0.0124**	**0.4652**	**0.1387**
TOTAL		***1.56***	***16.94***	***14.58***	***0.04***	***2.79***	***0.92***
Onsite	**2023**						
	Fugitive Dust	0.00	0.00	0.00	0.00	1.65	0.25
	Off-Road	1.47	14.32	13.46	0.02	0.68	0.63
	Total	**1.47**	**14.32**	**13.46**	**0.02**	**2.33**	**0.88**
Offsite							
	Hauling	0.04	2.43	0.63	0.01	0.31	0.09
	Vendor	0.00	0.16	0.06	0.00	0.02	0.01
	Worker	0.04	0.03	0.47	0.00	0.13	0.04
	Total	**0.09**	**2.62**	**1.15**	**0.01**	**0.47**	**0.14**
TOTAL		***1.56***	***16.94***	***14.61***	***0.04***	***2.79***	***1.02***

Site Preparation

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	**2023 Summer**						
	Fugitive Dust					0.6831	0.0739
	Off-Road	1.3027	14.2802	9.782	0.0245	0.5419	0.4985
	Total	**1.3027**	**14.2802**	**9.782**	**0.0245**	**1.225**	**0.5724**
Offsite							
	Hauling	0.0168	1.0113	0.2699	4.53E-03	0.1328	0.041
	Vendor	0.0115	0.3838	0.1487	1.86E-03	0.0619	0.0193
	Worker	0.0256	0.0179	0.2891	7.90E-04	0.083	0.0225
	Total	**0.0539**	**1.413**	**0.7077**	**7.18E-03**	**0.2777**	**0.0828**
TOTAL		***1.36***	***15.69***	***10.49***	***0.03***	***1.50***	***0.66***
Onsite	**2023 Winter**						
	Fugitive Dust					0.6831	0.0739
	Off-Road	1.3027	14.2802	9.782	0.0245	0.5419	0.4985
	Total	**1.3027**	**14.2802**	**9.782**	**0.0245**	**1.225**	**0.5724**
Offsite							
	Hauling	0.0157	1.0559	0.2736	4.54E-03	0.1328	0.0411
	Vendor	0.0111	0.4019	0.1534	1.86E-03	0.0619	0.0193
	Worker	0.0275	0.0197	0.2658	7.50E-04	0.083	0.0225
	Total	**0.0544**	**1.4775**	**0.6928**	**7.15E-03**	**0.2777**	**0.0828**

TOTAL			***1.36***	***15.76***	***10.47***	***0.03***	***1.50***	***0.59***
Onsite		**2023**						
	Fugitive Dust		0.00	0.00	0.00	0.00	0.68	0.07
	Off-Road		1.30	14.28	9.78	0.02	0.54	0.50
	Total		**1.30**	**14.28**	**9.78**	**0.02**	**1.23**	**0.57**
Offsite								
	Hauling		0.02	1.06	0.27	0.00	0.13	0.04
	Vendor		0.01	0.40	0.15	0.00	0.06	0.02
	Worker		0.03	0.02	0.29	0.00	0.08	0.02
	Total		**0.05**	**1.48**	**0.71**	**0.01**	**0.28**	**0.08**
TOTAL			***1.36***	***15.76***	***10.49***	***0.03***	***1.50***	***0.66***

Grading

			ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		**2023 Summer**						
	Fugitive Dust						3.0366	1.4654
	Off-Road		1.333	14.4676	8.7038	0.0206	0.6044	0.556
	Total		**1.333**	**14.4676**	**8.7038**	**0.0206**	**3.6409**	**2.0214**
Offsite								
	Hauling		0.0492	2.9592	0.7898	0.0133	0.3886	0.1201
	Vendor		0.0115	0.3838	0.1487	1.86E-03	0.0619	0.0193
	Worker		0.032	0.0223	0.3614	9.90E-04	0.1037	0.0281
	Total		**0.0927**	**3.3654**	**1.2999**	**0.0161**	**0.5542**	**0.1675**
TOTAL			***1.43***	***17.83***	***10.00***	***0.04***	***4.20***	***2.19***
Onsite		**2023 Winter**						
	Fugitive Dust						3.0366	1.4654
	Off-Road		1.333	14.4676	8.7038	0.0206	0.6044	0.556
	Total		**1.333**	**14.4676**	**8.7038**	**0.0206**	**3.6409**	**2.0214**
Offsite								
	Hauling		0.046	3.0897	0.8007	0.0133	0.3887	0.1201
	Vendor		0.0111	0.4019	0.1534	1.86E-03	0.0619	0.0193
	Worker		0.0344	0.0246	0.3322	9.40E-04	0.1037	0.0281
	Total		**0.0915**	**3.5162**	**1.2863**	**0.0161**	**0.5543**	**0.1675**
TOTAL			***1.42***	***17.98***	***9.99***	***0.04***	***4.20***	***2.05***
Onsite		**2023**						
	Fugitive Dust		0.00	0.00	0.00	0.00	3.04	1.47
	Off-Road		1.33	14.47	8.70	0.02	0.60	0.56
	Total		**1.33**	**14.47**	**8.70**	**0.02**	**3.64**	**2.02**
Offsite								
	Hauling		0.05	3.09	0.80	0.01	0.39	0.12
	Vendor		0.01	0.40	0.15	0.00	0.06	0.02
	Worker		0.03	0.02	0.36	0.00	0.10	0.03
	Total		**0.09**	**3.52**	**1.30**	**0.02**	**0.55**	**0.17**
TOTAL			***1.43***	***17.98***	***10.00***	***0.04***	***4.20***	***2.19***

Building Construction

			ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		**2023 Summer**						
	Off-Road		1.7136	13.6239	14.2145	0.025	0.6136	0.588
	Total		**1.7136**	**13.6239**	**14.2145**	**0.025**	**0.6136**	**0.588**
Offsite								
	Hauling		0	0	0	0	0	0
	Vendor		0.0622	2.0727	0.803	0.0101	0.3341	0.1041
	Worker		0.7297	0.5087	8.2399	0.0226	2.3644	0.641
	Total		**0.7918**	**2.5814**	**9.0429**	**0.0326**	**2.6986**	**0.7452**
TOTAL			***2.51***	***16.21***	***23.26***	***0.06***	***3.31***	***1.33***

Onsite		**2023 Winter**					
	Off-Road	1.7136	13.6239	14.2145	0.025	0.6136	0.588
	Total	**1.7136**	**13.6239**	**14.2145**	**0.025**	**0.6136**	**0.588**
Offsite							
	Hauling	0	0	0	0	0	0
	Vendor	0.06	2.1701	0.8282	0.0101	0.3342	0.1042
	Worker	0.784	0.5619	7.5738	0.0214	2.3644	0.641
	Total	**0.844**	**2.732**	**8.402**	**0.0314**	**2.6986**	**0.7452**
TOTAL		***2.56***	***16.36***	***22.62***	***0.06***	***3.31***	***1.33***

Onsite		**2023**					
	Off-Road	1.71	13.62	14.21	0.03	0.61	0.59
	Total	**1.71**	**13.62**	**14.21**	**0.03**	**0.61**	**0.59**
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.06	2.17	0.83	0.01	0.33	0.10
	Worker	0.78	0.56	8.24	0.02	2.36	0.64
	Total	**0.84**	**2.73**	**9.04**	**0.03**	**2.70**	**0.75**
TOTAL		***2.56***	***16.36***	***23.26***	***0.06***	***3.31***	***1.33***

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		**2024 Summer**					
	Off-Road	1.5971	12.8235	14.1002	0.025	0.5381	0.5153
	Total	**1.5971**	**12.8235**	**14.1002**	**0.025**	**0.5381**	**0.5153**
Offsite							
	Hauling	0	0	0	0	0	0
	Vendor	0.0603	2.0769	0.7859	9.89E-03	0.3342	0.1042
	Worker	0.6798	0.454	7.6568	0.0219	2.3638	0.6404
	Total	**0.7401**	**2.5309**	**8.4427**	**0.0318**	**2.698**	**0.7446**
TOTAL		***2.34***	***15.35***	***22.54***	***0.06***	***3.24***	***1.26***

Onsite		**2024 Winter**					
	Off-Road	1.5971	12.8235	14.1002	0.025	0.5381	0.5153
	Total	**1.5971**	**12.8235**	**14.1002**	**0.025**	**0.5381**	**0.5153**
Offsite							
	Hauling	0	0	0	0	0	0
	Vendor	0.058	2.1745	0.8108	9.91E-03	0.3343	0.1043
	Worker	0.7328	0.5014	7.0441	0.0208	2.3638	0.6404
	Total	**0.7909**	**2.6759**	**7.8549**	**0.0307**	**2.6981**	**0.7447**
TOTAL		***2.39***	***15.50***	***21.96***	***0.06***	***3.24***	***1.26***

Onsite		**2024**					
	Off-Road	1.60	12.82	14.10	0.03	0.54	0.52
	Total	**1.60**	**12.82**	**14.10**	**0.03**	**0.54**	**0.52**
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.06	2.17	0.81	0.01	0.33	0.10
	Worker	0.73	0.50	7.66	0.02	2.36	0.64
	Total	**0.79**	**2.68**	**8.44**	**0.03**	**2.70**	**0.74**
TOTAL		***2.39***	***15.50***	***22.54***	***0.06***	***3.24***	***1.26***

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		**2025 Summer**					
	Off-Road	1.4897	12.0233	14.0072	0.025	0.47	0.4498
	Total	**1.4897**	**12.0233**	**14.0072**	**0.025**	**0.47**	**0.4498**
Offsite							
	Hauling	0	0	0	0	0	0
	Vendor	0.0586	2.0671	0.7715	9.70E-03	0.3343	0.1042
	Worker	0.6355	0.4077	7.1211	0.0212	2.3631	0.6398

	Total	**0.694**	**2.4748**	**7.8926**	**0.0309**	**2.6973**	**0.744**
TOTAL		***2.18***	***14.50***	***21.90***	***0.06***	***3.17***	***1.19***
Onsite	**2025 Winter**						
	Off-Road	1.4897	12.0233	14.0072	0.025	0.47	0.4498
	Total	**1.4897**	**12.0233**	**14.0072**	**0.025**	**0.47**	**0.4498**
Offsite							
	Hauling	0	0	0	0	0	0
	Vendor	0.0563	2.1644	0.7961	9.72E-03	0.3343	0.1043
	Worker	0.6873	0.4501	6.5563	0.0201	2.3631	0.6398
	Total	**0.7436**	**2.6145**	**7.3524**	**0.0298**	**2.6974**	**0.7441**
TOTAL		***2.23***	***14.64***	***21.36***	***0.05***	***3.17***	***1.19***
Onsite	**2025**						
	Off-Road	1.49	12.02	14.01	0.03	0.47	0.45
	Total	**1.49**	**12.02**	**14.01**	**0.03**	**0.47**	**0.45**
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.06	2.16	0.80	0.01	0.33	0.10
	Worker	0.69	0.45	7.12	0.02	2.36	0.64
	Total	**0.74**	**2.61**	**7.89**	**0.03**	**2.70**	**0.74**
TOTAL		***2.23***	***14.64***	***21.90***	***0.06***	***3.17***	***1.19***

Architectural Coating

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	**2025 Summer**						
	Archit. Coating	69.2594				0	0
	Off-Road	0.1709	1.1455	1.8091	2.97E-03	0.0515	0.0515
	Total	**69.4303**	**1.1455**	**1.8091**	**2.97E-03**	**0.0515**	**0.0515**
Offsite							
	Hauling	0	0	0	0	0	0
	Vendor	0	0	0	0	0	0
	Worker	0.1282	0.0823	1.4367	4.27E-03	0.4768	0.1291
	Total	**0.1282**	**0.0823**	**1.4367**	**4.27E-03**	**0.4768**	**0.1291**
TOTAL		***69.56***	***1.23***	***3.25***	***0.01***	***0.53***	***0.18***
Onsite	**2025 Winter**						
	Archit. Coating	69.2594				0	0
	Off-Road	0.1709	1.1455	1.8091	2.97E-03	0.0515	0.0515
	Total	**69.4303**	**1.1455**	**1.8091**	**2.97E-03**	**0.0515**	**0.0515**
Offsite							
	Hauling	0	0	0	0	0	0
	Vendor	0	0	0	0	0	0
	Worker	0.1387	0.0908	1.3228	4.05E-03	0.4768	0.1291
	Total	**0.1387**	**0.0908**	**1.3228**	**4.05E-03**	**0.4768**	**0.1291**
TOTAL		***69.57***	***1.24***	***3.13***	***0.01***	***0.53***	***0.18***
Onsite	**2025**						
	Archit. Coating	69.26	0.00	0.00	0.00	0.00	0.00
	Off-Road	0.17	1.15	1.81	0.00	0.05	0.05
	Total	**69.43**	**1.15**	**1.81**	**0.00**	**0.05**	**0.05**
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.14	0.09	1.44	0.00	0.48	0.13
	Total	**0.14**	**0.09**	**1.44**	**0.00**	**0.48**	**0.13**
TOTAL		***69.57***	***1.24***	***3.25***	***0.01***	***0.53***	***0.18***

Building Construction & Architectural Coating		**71.28**	**14.86**	**17.46**	**0.03**	**1.14**	**0.77**

Paving

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	**2025 Summer**						
	Off-Road	0.7854	7.4371	11.6737	0.0179	0.3503	0.3234
	Paving	0.0561				0	0
	Total	**0.8416**	**7.4371**	**11.6737**	**0.0179**	**0.3503**	**0.3234**
Offsite							
	Hauling	0	0	0	0	0	0
	Vendor	0	0	0	0	0	0
	Worker	0.0418	0.0268	0.4685	1.39E-03	0.1555	0.0421
	Total	**0.0418**	**0.0268**	**0.4685**	**1.39E-03**	**0.1555**	**0.0421**
TOTAL							
Onsite	**2025 Winter**						
	Off-Road	0.7854	7.4371	11.6737	0.0179	0.3503	0.3234
	Paving	0.0561				0	0
	Total	**0.8416**	**7.4371**	**11.6737**	**0.0179**	**0.3503**	**0.3234**
Offsite							
	Hauling	0	0	0	0	0	0
	Vendor	0	0	0	0	0	0
	Worker	0.0452	0.0296	0.4313	1.32E-03	0.1555	0.0421
	Total	**0.0452**	**0.0296**	**0.4313**	**1.32E-03**	**0.1555**	**0.0421**
TOTAL		***0.89***	***7.47***	***12.11***	***0.02***	***0.51***	***0.37***
Onsite	**2025**						
	Off-Road	0.79	7.44	11.67	0.02	0.35	0.32
	Paving	0.06	0.00	0.00	0.00	0.00	0.00
	Total	**0.84**	**7.44**	**11.67**	**0.02**	**0.35**	**0.32**
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.05	0.03	0.47	0.00	0.16	0.04
	Total	**0.05**	**0.03**	**0.47**	**0.00**	**0.16**	**0.04**
TOTAL		***0.89***	***7.47***	***12.14***	***0.02***	***0.51***	***0.37***
Building Consstruction, Architectural Coating, & Paving		**72.17**	**22.33**	**29.60**	**0.05**	**1.65**	**1.13**
MAX DAILY		**72**	**22**	**30**	**0.06**	**4**	**2**
Regional Thresholds		**75**	**100**	**550**	**150**	**150**	**55**
Exceeds Thresholds?		No	No	No	No	No	No

Localized Construction Emissions Worksheet - Unmitigated

*CalEEMod, Version 2020.4.0

Demolition

			NOx	CO	PM10 Total	PM2.5 Total
Onsite		**2023 Summer**				
	Fugitive Dust				1.6517	0.2501
	Off-Road		14.3184	13.4577	0.6766	0.6328
	Total		**14.3184**	**13.4577**	**2.3284**	**0.8829**
TOTAL			***14.32***	***13.46***	***2.33***	***0.88***
Onsite		**2023 Winter**				
	Fugitive Dust				1.6517	0.2501
	Off-Road		14.3184	13.4577	0.6766	0.6328
	Total		**14.3184**	**13.4577**	**2.3284**	**0.8829**
TOTAL			***14.32***	***13.46***	***2.33***	***0.88***
Onsite		**2023**				
	Fugitive Dust		0.00	0.00	1.65	0.25
	Off-Road		14.32	13.46	0.68	0.63
	Total		**14.32**	**13.46**	**2.33**	**0.88**
TOTAL			***14.32***	***13.46***	***2.33***	***0.88***
2.00-acre LST			**131**	**967**	**10.37**	**5.32**
Exceed Threshold?			No	No	No	No

Site Preparation

			NOx	CO	PM10 Total	PM2.5 Total
Onsite		**2023 Summer**				
	Fugitive Dust				0.6831	0.0739
	Off-Road		14.2802	9.782	0.5419	0.4985
	Total		**14.2802**	**9.782**	**1.225**	**0.5724**
TOTAL			***14.28***	***9.78***	***1.23***	***0.57***
Onsite		**2023 Winter**				
	Fugitive Dust				0.6831	0.0739
	Off-Road		14.2802	9.782	0.5419	0.4985
	Total		**14.2802**	**9.782**	**1.225**	**0.5724**
TOTAL			***14.28***	***9.78***	***1.23***	***0.57***
Onsite		**2023**				
	Fugitive Dust		0.00	0.00	0.68	0.07
	Off-Road		14.28	9.78	0.54	0.50
	Total		**14.28**	**9.78**	**1.23**	**0.57**
TOTAL			***14.28***	***9.78***	***1.23***	***0.57***
1.94-acre LST			**129**	**948**	**10.13**	**5.19**
Exceed Threshold?			No	No	No	No

Grading

			NOx	CO	PM10 Total	PM2.5 Total
Onsite		**2023 Summer**				
	Fugitive Dust				3.0366	1.4654
	Off-Road		14.4676	8.7038	0.6044	0.556
	Total		**14.4676**	**8.7038**	**3.6409**	**2.0214**
TOTAL			***14.47***	***8.70***	***3.64***	***2.02***
Onsite		**2023 Winter**				
	Fugitive Dust				3.0366	1.4654
	Off-Road		14.4676	8.7038	0.6044	0.556
	Total		**14.4676**	**8.7038**	**3.6409**	**2.0214**
TOTAL			***14.47***	***8.70***	***3.64***	***2.02***
Onsite		**2023**				
	Fugitive Dust		0.00	0.00	3.04	1.47

	Off-Road		14.47	8.70	0.60	0.56
	Total		**14.47**	**8.70**	**3.64**	**2.02**
TOTAL			***14.47***	***8.70***	***3.64***	***2.02***
1.88-acre LST			**126**	**929**	**9.88**	**5.07**
Exceed Threshold?			No	No	No	No

Building Construction

			NOx	CO	PM10 Total	PM2.5 Total
Onsite		**2023 Summer**				
	Off-Road		13.6239	14.2145	0.6136	0.588
	Total		**13.6239**	**14.2145**	**0.6136**	**0.588**
TOTAL			***13.62***	***14.21***	***0.61***	***0.59***
Onsite		**2023 Winter**				
	Off-Road		13.6239	14.2145	0.6136	0.588
	Total		**13.6239**	**14.2145**	**0.6136**	**0.588**
TOTAL			***13.62***	***14.21***	***0.61***	***0.59***
Onsite		**2023**				
	Off-Road		13.62	14.21	0.61	0.59
	Total		**13.62**	**14.21**	**0.61**	**0.59**
Offsite						
	Hauling		0.00	0.00	0.00	0.00
	Vendor		0.00	0.00	0.00	0.00
	Worker		0.00	0.00	0.00	0.00
	Total		**0.00**	**0.00**	**0.00**	**0.00**
TOTAL			***13.62***	***14.21***	***0.61***	***0.59***
<=1.00-acre LST			**91**	**664**	**6.42**	**3.32**
Exceed Threshold?			No	No	No	No

			NOx	CO	PM10 Total	PM2.5 Total
Onsite		**2024 Summer**				
	Off-Road		12.8235	14.1002	0.5381	0.5153
	Total		**12.8235**	**14.1002**	**0.5381**	**0.5153**
TOTAL			***12.82***	***14.10***	***0.54***	***0.52***
Onsite		**2024 Winter**				
	Off-Road		12.8235	14.1002	0.5381	0.5153
	Total		**12.8235**	**14.1002**	**0.5381**	**0.5153**
TOTAL			***12.82***	***14.10***	***0.54***	***0.52***
Onsite		**2024**				
	Off-Road		12.82	14.10	0.54	0.52
	Total		**12.82**	**14.10**	**0.54**	**0.52**
TOTAL			***12.82***	***14.10***	***0.54***	***0.52***
<=1.00-acre LST			**91**	**664**	**6.42**	**3.32**
Exceed Threshold?			No	No	No	No

			NOx	CO	PM10 Total	PM2.5 Total
Onsite		**2025 Summer**				
	Off-Road		12.0233	14.0072	0.47	0.4498
	Total		**12.0233**	**14.0072**	**0.47**	**0.4498**
TOTAL			***12.02***	***14.01***	***0.47***	***0.45***
Onsite		**2025 Winter**				
	Off-Road		12.0233	14.0072	0.47	0.4498
	Total		**12.0233**	**14.0072**	**0.47**	**0.4498**
TOTAL			***12.02***	***14.01***	***0.47***	***0.45***
Onsite		**2025**				
	Off-Road		12.02	14.01	0.47	0.45
	Total		**12.02**	**14.01**	**0.47**	**0.45**

TOTAL			***12.02***	***14.01***	***0.47***	***0.45***
<=1.00-acre LST			**91**	**664**	**6.42**	**3.32**
Exceed Threshold?			No	No	No	No
Architectural Coating						
			NOx	CO	PM10 Total	PM2.5 Total
Onsite		**2025 Summer**				
	Archit. Coating				0	0
	Off-Road		1.1455	1.8091	0.0515	0.0515
	Total		**1.1455**	**1.8091**	**0.0515**	**0.0515**
TOTAL			***1.15***	***1.81***	***0.05***	***0.05***
Onsite		**2025 Winter**				
	Archit. Coating				0	0
	Off-Road		1.1455	1.8091	0.0515	0.0515
	Total		**1.1455**	**1.8091**	**0.0515**	**0.0515**
TOTAL			***1.15***	***1.81***	***0.05***	***0.05***
Onsite		**2025**				
	Archit. Coating		0.00	0.00	0.00	0.00
	Off-Road		1.15	1.81	0.05	0.05
	Total		**1.15**	**1.81**	**0.05**	**0.05**
TOTAL			***1.15***	***1.81***	***0.05***	***0.05***
Building Construction & Architectural Coating			**14.77**	**16.02**	**0.67**	**0.64**
<=1.00-acre LST			**91**	**664**	**6.42**	**3.32**
Exceed Threshold?			No	No	No	No
Paving						
			NOx	CO	PM10 Total	PM2.5 Total
Onsite		**2025 Summer**				
	Off-Road		7.4371	11.6737	0.3503	0.3234
	Paving				0	0
	Total		**7.4371**	**11.6737**	**0.3503**	**0.3234**
TOTAL						
Onsite		**2025 Winter**				
	Off-Road		7.4371	11.6737	0.3503	0.3234
	Paving				0	0
	Total		**7.4371**	**11.6737**	**0.3503**	**0.3234**
TOTAL			***7.44***	***11.67***	***0.35***	***0.32***
Onsite		**2025**				
	Off-Road		7.44	11.67	0.35	0.32
	Paving		0.00	0.00	0.00	0.00
	Total		**7.44**	**11.67**	**0.35**	**0.32**
TOTAL			***7.44***	***11.67***	***0.35***	***0.32***
<=1.00-acre LST			**91**	**664**	**6.42**	**3.32**
Exceed Threshold?			No	No	No	No
Building Consstruction, Architectural Coating, & Paving			**22.21**	**27.70**	**1.02**	**0.96**
<=1.00-acre LST			**91**	**664**	**6.42**	**3.32**
Exceed Threshold?			No	No	No	No

Regional Operation Emissions Worksheet: Unmitigated*

*CalEEMod, Version 2020.4.0

Summer

	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Area	6.1959	0.2235	16.5493	1.09E-03	0.0943	0.0943
Energy	0.0659	0.563	0.2396	3.59E-03	0.0455	0.0455
Mobile	2.6751	2.6618	27.0063	0.0609	6.6192	1.7917
Total	**8.9369**	**3.4483**	**43.7952**	**0.0656**	**6.759**	**1.9316**

Winter

	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Area	6.1959	0.2235	16.5493	1.09E-03	0.0943	0.0943
Energy	0.0659	0.563	0.2396	3.59E-03	0.0455	0.0455
Mobile	2.6751	2.6618	27.0063	0.0609	6.6192	1.7917
Total	**8.9369**	**3.4483**	**43.7952**	**0.0656**	**6.759**	**1.9316**

Max Daily

	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Area	6.1959	0.2235	16.5493	0.00109	0.0943	0.0943
Energy	0.0659	0.563	0.2396	0.00359	0.0455	0.0455
Mobile	2.6751	2.6618	27.0063	0.0609	6.6192	1.7917
Total	**8.94**	**3.45**	**43.80**	**0.07**	**6.76**	**1.93**
Regional Thresholds	**55**	**55**	**550**	**150**	**150**	**55**
Exceeds Thresholds?	No	No	No	No	No	No

GHG Emissions Inventory

Construction[1]

	GHG Emissions ($MTCO_2e$)[2]
	$MTCO_2e$ Total
2023	184
2024	661
2025	615
Total Construction	**1,460**

[1]CalEEMod, Version 2020.4.0

[2]MTCO2e=metric tons of carbon dioxide equivalent.

Operation[1]

	Annual Emissions ($MTCO_2e$/Yr)	
Area	**4**	0%
Energy	**466**	29%
Mobile	**978**	61%
Solid Waste	**46**	3%
Water	**51**	3%
Amortized Construction Emissions[2]	**49**	3%
Total	**1,594**	100%
South Coast AQMD Bright-Line Screening Threshold	3,000	
Exceed Threshold?	**No**	

[1]CalEEMod, Version 2020.4.0

[2]Total construction emissions are amortized over 30 years per South Coast AQMD methodology; South Coast AQMD. 2009, November 19. Greenhouse Gases (GHG) CEQA Significance Thresholds Working Group Meeting 14. http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-14/ghg-meeting-14-main-presentation.pdf?sfvrsn=2.

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Appendix B – Modeling Assumptions

CalEEMod Inputs - Construction

Name:

Project Number:	LEGP-01
Project Location:	Northeast corner of Del Amo Circle West and West Carson Street, City of Torrance
County:	Los Angeles County (SC)
Source Receptor Area (SRA):	3 - Southwest Coastal LA County
Climate Zone:	8
Land Use Setting:	Urban
Operational Year:	NA
Utility Company:	SCE/SoCalGas
Air Basin:	South Coast Air Basin
Air District:	South Coast Air Quality Management District (South Coast AQMD)

	Main Project Site	Off-Site Area	Total
Proiect Site Acreage	2.83	0.09	2.92
Disturbed Site Acreage	2.83	0.09	2.92

	Number of Units	Land Use Area (SF)	Floor Area (SF)	Acres
Apartments Mid-Rise	200	234,928	46,986	1.08
Roof Deck		5,638	0	0.00
Parking Structure	440	169,946	23,808	0.55
TOTAL BUILDING			**70,794**	**1.63**
Landscaping	--	26,100	26,100	0.60
Asphalt		19,400	19,400	0.45
Hardscape		11,011	11,011	0.25
				2.92

CalEEMod Land Use Inputs

Land Use Type	Land Use Subtype	Unit Amount	Size Metric	Lot Acreage	Land Use Square Feet
Residential	Apartments Mid-Rise	200	DU	1.08	240,566
Parking Lot	Enclosed Parking with Elevator	440	Stalls	0.55	169,946
Parking Lot	Other Non-Asphalt	37.111	1000 BSF	0.85	11,011
Parking Lot	Other Asphalt	19.40	1000 BSF	0.45	19,400
				2.92	

Demolition

Component	Tons Demolished	Haul Truck Capacity (tons)	Haul Distance (miles)*	Total Trip Ends	Duration (days)	Trip Ends/ day
Asphalt Demolition	3,250	20	20	321	18	18

Soil Haul

Construction Activities	Haul Volume (cy)	Haul Truck Capacity (CY)	Haul Distance (miles)	Total Trip Ends	Duration (days)	Trip Ends/ day
Site Preparation	500	16	20.00	63	8	8
Grading	10,700	16	20.00	1,338	59	23

Architectural Coating

Land Use	Land Use Square Feet	CalEEMod Factor[1]	Total Paintable Surface Area	Paintable Interior Area[2]	Paintable Exterior Area[1]
Apartments Mid-Rise	240,566	2.7	649,528	487,146	162,382
Enclosed Parking with Elevator	169,946	2.00	339,892	254,919	84,973
Parking/Accessway	189,346	0.06	11,361	-	11,361

[1] *The program assumes the total surface for painting equals 2.7 times and 2 times the floor square footage for residential and nonresidential square footage defined by the user, respectively. Architectural coatings for the parking lot is based on CalEEMod methodology applied to a surface parking lot (i.e., striping), in which 6% of surface area is painted.*

[2] *CalEEMod methodology calculates the paintable interior and exterior areas by multiplying the total paintable surface area by 75 and 25 percent, respectively.*

Construction Mitigation

South Coast AQMD Rule 403

Replace Ground Cover	PM10:	5	% Reduction
Replace Ground Cover	PM2.5:	5	% Reduction
Water Exposed Area	Frequency:	2	per day
	PM10:	55	% Reduction
	PM25:	55	% Reduction
Unpaved Roads	Vehicle Speed:	15	mph

South Coast AQMD Rule 1186

	Clean Paved Road	9	% PM Reduction

Construction Activities and Schedule Assumptions:

* Based on info provided by Applicant

Construction Default Schedule

		Construction Schedule			
Construction Activities	**Phase Type**	**Start Date**	**End Date**	**CalEEMod Duration (Workday)**	**Calendar Days**
Building Demolition	Demolition	1/1/2024	1/30/2024	20	29
Site Preparation	Site Preparation	1/31/2024	2/4/2024	3	4
Rough Grading	Grading	2/5/2024	2/13/2024	6	8
Building Construction	Building Construction	2/14/2024	12/18/2024	220	308
Paving	Paving	12/19/2024	1/2/2025	10	14
Architectural Coating	Architectural Coating	1/3/2025	1/17/2025	10	14

CalEEMod Default Days: 382

Assumed Start Date: 1/2/2024

Assumed End Date: 12/31/2026

Total Duration (calendar days): 1,094

Adjustment Factor: 2.86

Adjusted Construction Schedule for CalEEMod

		Construction Schedule			
Construction Activities	**Phase Type**	**Start Date**	**End Date**	**CalEEMod Duration (Workday)**	**Calendar Days**
Asphalt Demolition	Demolition	8/14/2023	9/6/2023	18	23
Site Preparation	Site Preparation	9/7/2023	9/18/2023	8	11
Rough Grading	Grading	9/19/2023	12/8/2023	59	80
Building Construction	Building Construction	12/9/2023	11/28/2025	515	720
Architectural Coating	Architectural Coating	10/29/2025	11/28/2025	23	30
Paving	Paving	11/15/2025	12/15/2025	21	30

CalEEMod Construction Off-Road Equipment Inputs:

**Otherwise where noted, based on CalEEMod default used for construction equipment and verified by Applicant.*

General Construction Hours: btwn 7:00 AM to 4:00 PM (with 1 hr break), Mon-Fri

Construction Equipment Details					
Equipment	**# of Equipment**	**hr/day**	**hp**	**load factor***	**total trips**
Demolition					
Concrete Industrial Saw	1	8	81	0.73	NA
Rubber Tired Dozers	1	8	247	0.4	
Tractors/Loaders/Backhoes	3	8	97	0.37	
Worker Trips					13
Vendor Trips					4
Vendor Trips					*0*
Water Trucks [1]					*4*
Hauling Trips					321
Site Preparation					
Graders	1	8	187	0.41	NA
Scrapers	1	8	367	0.48	
Tractors/Loaders/Backhoes	1	7	97	0.37	
Worker Trips					8
Vendor Trips					10
Vendor Trips					*0*
Water Trucks [2]					*10*
Hauling Trips					63
Grading					
Graders	1	8	187		NA
Rubber Tired Dozers	1	8	247		
Tractors/Loaders/Backhoes	2	7	97		
Worker Trips					10
Vendor Trips					10
Vendor Trips					*0*
Water Trucks [2]					*10*
Hauling Trips					1,338
Building Construction					
Cranes	1	8	231	0.29	NA
Forklifts	2	7	89	0.2	
Generator Sets	1	8	84	0.74	
Tractors/Loaders/Backhoes	1	6	97	0.37	
Welders	3	8	46	0.45	
Worker Trips					228
Vendor Trips					54
Architectural Coating					
Air Compressors	1	6	78	0.48	NA
Worker Trips					46
Vendor Trips					0
Paving/Finishing					
Cement and Mortar Mixers	1	8	9	0.56	NA
Pavers	1	8	130	0.42	
Paving Equipment	1	8	132	0.36	
Rollers	2	8	80	0.38	
Tractors/Loaders/Backhoes	1	8	97	0.37	
Worker Trips					15
Vendor Trips					0

[1] *Assumes one water truck and 4 trips per day per water truck.*

[2] *Based on 10,000 gallons per acres disturbed and a 4,000 gallon water truck. 2005, June 5. Maricopa Air Quality Department. Guidance for Application for Dust Control Permit.*

CalEEMod Inputs - Operation: Proposed Project

Name:

Project Number:	LEGP-01
Project Location:	Northeast corner of Del Amo Circle West and West Carson Street, City of Torrance
County:	Los Angeles County (SC)
Source Receptor Area (SRA):	3 - Southwest Coastal LA County
Climate Zone:	8
Land Use Setting:	Urban
Operational Year:	2025
Utility Company:	SCE/SoCalGas
Air Basin:	South Coast Air Basin
Air District:	South Coast Air Quality Management District (South Coast AQMD)

	Main Project Site	Off-Site Area	Total
Project Site Acreage	2.83	0.09	2.92

	Number of Units	Land Use Area (SF)	Floor Area (SF)	Acres
Apartments Mid-Rise	200	234,928	46,986	1.08
Roof Deck		5,638	0	0
Parking Structure	440	169,946	23,808	0.55
TOTAL BUILDING		**410,512**	**70,794**	**1.63**
Landscaping		25,773	25,773	0.59
Asphalt Driveway		19,400	19,400	0.45
Hardscape		11,011	11,011	0.25

CalEEMod Land Use Inputs

Land Use Type	Land Use Subtype	Unit Amount	Size Metric	Lot Acreage	Land Use Square Feet
Residential	Apartments Mid-Rise	200	DU	1.08	240,566
Parking Lot	Enclosed Parking w/Elevator	169,946	Stalls	0.55	169,946
Parking Lot	Other Asphalt	19	1000 BSF	0.45	19,400
Parking Lot	Other Non-Asphalt	56.184	1000 BSF	0.84	11,011
				2.92	

Project Trips CalEEMod Inputs[1]

Land Use	Weekday Trip Rate	Saturday Trip Rate	Sunday Trip Rate
Apartments Mid-Rise	4.54	4.57	3.77

[1] *Based on information provided by Linscott, Law, & Greenspan Engineers (see Appendix D).*

Water Demand*

Land Use	Daily Indoor (gal/day)[1]	Annual Indoor (gal/yr)[2]	Annual Outdoor (gal/yr)[3]
Apartments Mid-Rise	42,162	15,389,130	0
Landscaping	0	0	317,217
	TOTAL	**15,389,130**	**317,217**

*Assumes 100% aerobic treatment.

[1] *Based on gallons per day data provided by Fuscoe Engineering (see Appendix D).*

[2] *Based on 365 days per year.*

[3] *Based on information provided by MJS Landscape Architect (see Appendix D)*

Solid Waste

Land Use	Amount (tons/yr)[1]
Apartments Mid-Rise	92

[1] *CalEEMod default.*

Architectural Coating

Land Use	Land Use Square Feet	CalEEMod Factor[1]	Total Paintable Surface	Paintable Interior Area[2]	Paintable Exterior Area[2]
Apartments Mid-Rise	240,566	2.7	649,528	487,146	162,382
Enclosed Parking w/Elevator	169,946	2.0	339,892	254,919	84,973
Parking Structure	189,346	6%	11,361		11,361

[1] *The program assumes the total surface for painting equals 2.7 and 2.0 times the floor square footage for residential and nonresidential square footage defined by the user, respectively. Architectural coatings for the parking lot is based on CalEEMod methodology applied to a surface parking lot (i.e., striping), in which 6% of surface area is painted.*

[2] *CalEEMod methodology calculates the paintable interior and exterior areas by multiplying the total paintable surface area by 75 and 25 percent, respectively.*

Carbon Intensity Factors

Southern California Edison Carbon Intensity Factors

SCE CO_2e Intensity Factor[1]	452	pounds per megawatt hour
CO2:[1,2]	449.983	pounds per megawatt hour
CH4:[3]	0.033	pound per megawatt hour
N2O:[3]	0.004	pound per megawatt hour

[1] *Based on CO_2e intensity factor of 452 pounds per megawatt hour; Southern California Edison. 2022, June. 2021 Sustainability Report. https://www.edison.com/content/dam/eix/documents/sustainability/eix-2021-sustainability-report.pdf*

[2] *Based on Intergovernmental Panel on Climate Change Fourth Assessment Report global warming potentials for CH4 and N2O; Intergovernmental Panel on Climate Change (IPCC). 2007. Fourth Assessment Report: Climate Change 2007.*

[3] *CalEEMod default values.*

General Conversion Factors

lbs to kg	0.4536
kg to MTons	0.001
Mmbtu to Therm	0.1
Therms to kwh	29.30711111
kilowatt hrs to megawatt hrs	0.001
lbs to Tons	2000
Tons to MTon	0.9071847

Source: California Air Resources Board (CARB). 2010. Local Government Operations Protocol. Version 1.1. Appendix F, Standard Conversion Factors

Global Warming Potentials (GWP)	
CO_2	1
CH_4	25
N_2O	298

Based on Intergovernmental Panel on Climate Change Fourth Assessment Report global warming potentials for CH4 and N2O; Intergovernmental Panel on Climate Change (IPCC). 2007. Fourth Assessment Report: Climate Change 2007.

Construction Localized Significance Thresholds: Asphalt Demolition

		NOx & CO		PM10 & PM2.5		
SRA No.	Acres	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Construction / Project Site Size (Acres)
3	2.00	25	82	29	95	2.84

Source Receptor Area **Southwest Coastal LA County**

Distance (meters) 25

NOx **131**

CO **967**

PM10 **10.37**

PM2.5 **5.32**

Equipment	Acres/8-hr Day		Number of Equipment	Daily Hours	Acres
Tractors	0.5	0.0625	3	8	1.5
Graders	0.5	0.0625			0
Dozers	0.5	0.0625	1	8	0.5
Scrapers	1	0.125			0
				Acres	2.00

	Acres	**25**	**50**	**100**	**200**	**500**
NOx	2	131	128	139	165	233
	2	131	128	139	165	233
		131	128	139	165	233
CO	2	967	1158	1597	2783	7950
	2	967	1158	1597	2783	7950
		967	1158	1597	2783	7950
PM10	2	8	23	37	65	148
	2	8	23	37	65	148
		8	23	37	65	148
PM2.5	2	5	7	12	25	81
	2	5	7	12	25	81
		5	7	12	25	81

Southwest Coastal LA County

2.00 Acres

	25	**50**	**100**	**200**	**500**
NOx	131	128	139	165	233
CO	967	1158	1597	2783	7950
PM10	8	23	37	65	148
PM2.5	5	7	12	25	81

Acre Below		**Acre Above**	
SRA No.	Acres	SRA No.	Acres
3	2	3	2
Distance Increment Below			
25			
Distance Increment Above			
25			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

Construction Localized Significance Thresholds: Site Preparation

		NOx & CO		*PM10 & PM2.5*		
SRA No.	Acres	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Construction / Project Site Size (Acres)
3	1.94	25	82	29	95	2.84

Source Receptor Area	**Southwest Coastal LA Coun**	**Equipment**	**Acres/8-hr Day**		**Number of Equipment**	**Daily Hours**	**Acres**
Distance (meters)	25	Tractors	0.5	0.0625	1	7	0.4375
NOx	**129**	Graders	0.5	0.0625	1	8	0.5
CO	**948**	Dozers	0.5	0.0625			0
PM10	**10.13**	Scrapers	1	0.125	1	8	1
PM2.5	**5.19**					**Acres**	1.94

	Acres	**25**	**50**	**100**	**200**	**500**
NOx	1	91	93	107	139	218
	2	131	128	139	165	233
		129	126	137	163	232
CO	1	664	785	1156	2228	7269
	2	967	1158	1597	2783	7950
		948	1135	1569	2748	7907
PM10	1	5	14	28	56	140
	2	8	23	37	65	148
		8	22	36	64	148
PM2.5	1	3	5	9	21	75
	2	5	7	12	25	81
		5	7	12	25	81

Southwest Coastal LA County

1.94 Acres

	25	**50**	**100**	**200**	**500**
NOx	129	126	137	163	232
CO	948	1135	1569	2748	7907
PM10	8	22	36	64	148
PM2.5	5	7	12	25	81

Acre Below		**Acre Above**	
SRA No.	Acres	SRA No.	Acres
3	1	3	2
Distance Increment Below			
25			
Distance Increment Above			
25			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

Construction Localized Significance Thresholds: Grading

		NOx & CO		*PM10 & PM2.5*		
SRA No.	Acres	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Construction / Project Site Size (Acres)
3	1.88	25	82	29	95	68.80

Source Receptor Area	**Southwest Coastal LA Coun**	**Equipment**	**Acres/8-hr Day**		**Number of Equipment**	**Daily Hours**	**Acres**
Distance (meters)	25	Tractors	0.5	0.0625	2	7	0.875
NOx	**126**	Graders	0.5	0.0625	1	8	0.5
CO	**929**	Dozers	0.5	0.0625	1	8	0.5
PM10	**9.88**	Scrapers	1	0.125			0
PM2.5	**5.07**					**Acres**	1.88

	Acres	**25**	**50**	**100**	**200**	**500**
NOx	1	91	93	107	139	218
	2	131	128	139	165	233
		126	124	135	162	231
CO	1	664	785	1156	2228	7269
	2	967	1158	1597	2783	7950
		929	1111	1542	2714	7865
PM10	1	5	14	28	56	140
	2	8	23	37	65	148
		8	22	36	64	147
PM2.5	1	3	5	9	21	75
	2	5	7	12	25	81
		5	7	12	25	80

Southwest Coastal LA County

1.88 Acres

	25	**50**	**100**	**200**	**500**
NOx	126	124	135	162	231
CO	929	1111	1542	2714	7865
PM10	8	22	36	64	147
PM2.5	5	7	12	25	80

Acre Below		**Acre Above**	
SRA No.	Acres	SRA No.	Acres
3	1	3	2
Distance Increment Below			
25			
Distance Increment Above			
25			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

Construction Localized Significance Thresholds: Building Construction

		NOx & CO		*PM10 & PM2.5*		
SRA No.	Acres	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Construction / Project Site Size (Acres)
3	0.38	25	82	29	95	2.84

Source Receptor Area	**Southwest Coastal LA Coun**	**Equipment**	**Acres/8-hr Day**		**Number of Equipment**	**Daily Hours**	**Acres**
Distance (meters)	25	Tractors	0.5	0.0625	1	6	0.375
NOx	**91**	Graders	0.5	0.0625			0
CO	**664**	Dozers	0.5	0.0625			0
PM10	**6.42**	Scrapers	1	0.125			0
PM2.5	**3.32**					**Acres**	0.38

	Acres	**25**	**50**	**100**	**200**	**500**
NOx	1	91	93	107	139	218
	1	91	93	107	139	218
		91	93	107	139	218
CO	1	664	785	1156	2228	7269
	1	664	785	1156	2228	7269
		664	785	1156	2228	7269
PM10	1	5	14	28	56	140
	1	5	14	28	56	140
		5	14	28	56	140
PM2.5	1	3	5	9	21	75
	1	3	5	9	21	75
		3	5	9	21	75

Southwest Coastal LA County

0.38 Acres

	25	**50**	**100**	**200**	**500**
NOx	91	93	107	139	218
CO	664	785	1156	2228	7269
PM10	5	14	28	56	140
PM2.5	3	5	9	21	75

Acre Below		**Acre Above**	
SRA No.	Acres	SRA No.	Acres
3	1	3	1
Distance Increment Below			
25			
Distance Increment Above			
25			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

Construction Localized Significance Thresholds: Building Construction and Architectural Coating

		NOx & CO		*PM10 & PM2.5*		
SRA No.	Acres	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Construction / Project Site Size (Acres)
3	0.38	25	82	29	95	2.84

Source Receptor Area	**Southwest Coastal LA Coun**	**Equipment**	**Acres/8-hr Day**		**Number of Equipment**	**Daily Hours**	**Acres**
Distance (meters)	25	Tractors	0.5	0.0625	1	6	0.375
NOx	**91**	Graders	0.5	0.0625			0
CO	**664**	Dozers	0.5	0.0625			0
PM10	**6.42**	Scrapers	1	0.125			0
PM2.5	**3.32**					**Acres**	0.38

	Acres	**25**	**50**	**100**	**200**	**500**
NOx	1	91	93	107	139	218
	1	91	93	107	139	218
		91	93	107	139	218
CO	1	664	785	1156	2228	7269
	1	664	785	1156	2228	7269
		664	785	1156	2228	7269
PM10	1	5	14	28	56	140
	1	5	14	28	56	140
		5	14	28	56	140
PM2.5	1	3	5	9	21	75
	1	3	5	9	21	75
		3	5	9	21	75

Southwest Coastal LA County

0.38 Acres

	25	**50**	**100**	**200**	**500**
NOx	91	93	107	139	218
CO	664	785	1156	2228	7269
PM10	5	14	28	56	140
PM2.5	3	5	9	21	75

Acre Below		**Acre Above**	
SRA No.	Acres	SRA No.	Acres
3	1	3	1
Distance Increment Below			
25			
Distance Increment Above			
25			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

Construction Localized Significance Thresholds: Building Construction, Architectural Coating, and Paving/Finishing

		NOx & CO		*PM10 & PM2.5*		
SRA No.	Acres	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Construction / Project Site Size (Acres)
3	0.88	25	82	29	95	2.84

Source Receptor Area	**Southwest Coastal LA Coun**	**Equipment**	**Acres/8-hr Day**		**Number of Equipment**	**Daily Hours**	**Acres**
Distance (meters)	25	Tractors	0.5	0.0625	1	6	0.375
NOx	**91**	Tractors	0.5	0.0625	1	8	0.5
CO	**664**	Graders	0.5	0.0625			0
PM10	**6.42**	Dozers	0.5	0.0625			0
PM2.5	**3.32**	Scrapers	1	0.125			0
						Acres	0.88

	Acres	**25**	**50**	**100**	**200**	**500**
NOx	1	91	93	107	139	218
	1	91	93	107	139	218
		91	93	107	139	218
CO	1	664	785	1156	2228	7269
	1	664	785	1156	2228	7269
		664	785	1156	2228	7269
PM10	1	5	14	28	56	140
	1	5	14	28	56	140
		5	14	28	56	140
PM2.5	1	3	5	9	21	75
	1	3	5	9	21	75
		3	5	9	21	75

Southwest Coastal LA County

0.88 Acres

	25	**50**	**100**	**200**	**500**
NOx	91	93	107	139	218
CO	664	785	1156	2228	7269
PM10	5	14	28	56	140
PM2.5	3	5	9	21	75

Acre Below		**Acre Above**	
SRA No.	Acres	SRA No.	Acres
3	1	3	1
Distance Increment Below			
25			
Distance Increment Above			
25			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

Construction Localized Significance Thresholds: Paving/Finishing

		NOx & CO		*PM10 & PM2.5*		
SRA No.	Acres	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Construction / Project Site Size (Acres)
3	0.50	25	82	29	95	2.84

Source Receptor Area	**Southwest Coastal LA Coun**	**Equipment**	**Acres/8-hr Day**		**Number of Equipment**	**Daily Hours**	**Acres**
Distance (meters)	25	Tractors	0.5	0.0625	1	8	0.5
NOx	**91**	Graders	0.5	0.0625			0
CO	**664**	Dozers	0.5	0.0625			0.0
PM10	**6.42**	Scrapers	1	0.125			0.0
PM2.5	**3.32**					**Acres**	0.50

	Acres	**25**	**50**	**100**	**200**	**500**
NOx	1	91	93	107	139	218
	1	91	93	107	139	218
		91	93	107	139	218
CO	1	664	785	1156	2228	7269
	1	664	785	1156	2228	7269
		664	785	1156	2228	7269
PM10	1	5	14	28	56	140
	1	5	14	28	56	140
		5	14	28	56	140
PM2.5	1	3	5	9	21	75
	1	3	5	9	21	75
		3	5	9	21	75

Southwest Coastal LA County

0.50 Acres

	25	**50**	**100**	**200**	**500**
NOx	91	93	107	139	218
CO	664	785	1156	2228	7269
PM10	5	14	28	56	140
PM2.5	3	5	9	21	75

Acre Below		**Acre Above**	
SRA No.	Acres	SRA No.	Acres
3	1	3	1
Distance Increment Below			
25			
Distance Increment Above			
25			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

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Appendix C – CalEEMod Output Files

Del Amo Circle Apt - Los Angeles-South Coast County, Summer

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

Del Amo Circle Apt

Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Mid Rise	200.00	Dwelling Unit	1.08	240,556.00	572
Enclosed Parking with Elevator	440.00	Space	0.55	169,946.00	0
Other Asphalt Surfaces	19.40	1000sqft	0.45	19,400.00	0
Other Non-Asphalt Surfaces	37.11	1000sqft	0.85	11,011.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	8			**Operational Year**	2025
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	449.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Based on the CO2e intensity of 452 lbs/MWh per the Southern California Edison 2021 Sustainability Report.

Land Use - Based on information provided by the applicant.

Construction Phase - Based on information provided/verified by the Applicant and CalEEMod defaults.

Grading -

Demolition -

Trips and VMT - Assumes water trucks for demolition, site preparation, and grading. See assumptions in the AQ/GHG appendix.

Architectural Coating - Assumes architectural coating and striping of parking structure and striping of the proposed accessway. See assumptions in the AQ/GHG appendix.

Vehicle Trips - Based on information provided by LLG.

Woodstoves - Accounts for the two firepits for resident use. Assumes no wood stoves per South Coast AQMD Rule 445 and no fireplaces for dwelling units per the site plan.

Area Coating - Assumes architectural coating and striping for the parking structure and striping for the accessway.

Water And Wastewater - See assumptions in the AQ/GHG appendix.

Del Amo Circle Apt - Los Angeles-South Coast County, Summer

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

Construction Off-road Equipment Mitigation - Based on South Coast AQMD Rules 403 and 1186.

Water Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	0.00	84,973.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	0.00	254,919.00
tblArchitecturalCoating	ConstArea_Parking	12,021.00	11,361.00
tblAreaCoating	Area_Nonresidential_Exterior	0	84973
tblAreaCoating	Area_Nonresidential_Interior	0	254919
tblAreaCoating	Area_Parking	12021	11361
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	10.00	23.00
tblConstructionPhase	NumDays	220.00	515.00
tblConstructionPhase	NumDays	20.00	18.00
tblConstructionPhase	NumDays	6.00	59.00
tblConstructionPhase	NumDays	10.00	21.00
tblConstructionPhase	NumDays	3.00	8.00
tblConstructionPhase	PhaseEndDate	8/22/2024	11/28/2025
tblConstructionPhase	PhaseEndDate	7/25/2024	11/28/2025
tblConstructionPhase	PhaseEndDate	9/8/2023	9/6/2023
tblConstructionPhase	PhaseEndDate	9/21/2023	12/8/2023
tblConstructionPhase	PhaseEndDate	8/8/2024	12/15/2025
tblConstructionPhase	PhaseEndDate	9/13/2023	9/18/2023
tblConstructionPhase	PhaseStartDate	8/9/2024	10/29/2025
tblConstructionPhase	PhaseStartDate	9/22/2023	12/9/2023
tblConstructionPhase	PhaseStartDate	9/14/2023	9/19/2023
tblConstructionPhase	PhaseStartDate	7/26/2024	11/15/2025
tblConstructionPhase	PhaseStartDate	9/9/2023	9/7/2023
tblFireplaces	NumberGas	170.00	2.00
tblFireplaces	NumberNoFireplace	20.00	198.00

Del Amo Circle Apt - Los Angeles-South Coast County, Summer

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

tblFireplaces	NumberWood	10.00	0.00
tblGrading	MaterialExported	0.00	10,700.00
tblGrading	MaterialExported	0.00	500.00
tblLandUse	LandUseSquareFeet	200,000.00	240,556.00
tblLandUse	LandUseSquareFeet	176,000.00	169,946.00
tblLandUse	LandUseSquareFeet	37,111.00	11,011.00
tblLandUse	LotAcreage	5.26	1.08
tblLandUse	LotAcreage	3.96	0.55
tblProjectCharacteristics	CO2IntensityFactor	390.98	449.98
tblTripsAndVMT	HaulingTripNumber	63.00	62.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblVehicleTrips	ST_TR	4.91	4.57
tblVehicleTrips	SU_TR	4.09	3.77
tblVehicleTrips	WD_TR	5.44	4.54
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	IndoorWaterUseRate	13,030,805.12	15,389,130.00
tblWater	OutdoorWaterUseRate	8,215,072.80	317,217.00
tblWater	SepticTankPercent	10.33	0.00
tblWoodstoves	NumberCatalytic	10.00	0.00
tblWoodstoves	NumberNoncatalytic	10.00	0.00

Del Amo Circle Apt - Los Angeles-South Coast County, Summer

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

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

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	lb/day										lb/day					
2023	2.5055	17.8330	23.2573	0.0576	7.6759	0.6930	8.3015	3.5848	0.6484	4.1611	0.0000	5,651.2205	5,651.2205	0.8043	0.2625	5,726.4061
2024	2.3372	15.3544	22.5428	0.0568	2.8944	0.5632	3.4576	0.7755	0.5388	1.3143	0.0000	5,570.4816	5,570.4816	0.5149	0.2023	5,643.6249
2025	139.5956	23.1898	37.2879	0.0824	3.5762	0.9000	4.4762	0.9563	0.8511	1.8073	0.0000	8,040.0813	8,040.0813	1.0733	0.2086	8,129.0783
Maximum	**139.5956**	**23.1898**	**37.2879**	**0.0824**	**7.6759**	**0.9000**	**8.3015**	**3.5848**	**0.8511**	**4.1611**	**0.0000**	**8,040.0813**	**8,040.0813**	**1.0733**	**0.2625**	**8,129.0783**

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	lb/day										lb/day					
2023	2.5055	17.8330	23.2573	0.0576	3.5695	0.6930	4.1951	1.6126	0.6484	2.1889	0.0000	5,651.2205	5,651.2205	0.8043	0.2625	5,726.4061
2024	2.3372	15.3544	22.5428	0.0568	2.6728	0.5632	3.2361	0.7211	0.5388	1.2599	0.0000	5,570.4816	5,570.4816	0.5149	0.2023	5,643.6249
2025	139.5956	23.1898	37.2879	0.0824	3.3013	0.9000	4.2013	0.8888	0.8511	1.7399	0.0000	8,040.0813	8,040.0813	1.0733	0.2086	8,129.0783
Maximum	**139.5956**	**23.1898**	**37.2879**	**0.0824**	**3.5695**	**0.9000**	**4.2013**	**1.6126**	**0.8511**	**2.1889**	**0.0000**	**8,040.0813**	**8,040.0813**	**1.0733**	**0.2625**	**8,129.0783**

Del Amo Circle Apt - Los Angeles-South Coast County, Summer

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	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**32.54**	**0.00**	**28.35**	**39.39**	**0.00**	**28.75**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

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	6.1959	0.2235	16.5493	1.0900e-003		0.0943	0.0943		0.0943	0.0943	0.0000	72.1721	72.1721	0.0296	7.8000e-004	73.1421
Energy	0.0659	0.5630	0.2396	3.5900e-003		0.0455	0.0455		0.0455	0.0455		718.7507	718.7507	0.0138	0.0132	723.0219
Mobile	2.6751	2.6618	27.0063	0.0609	6.5761	0.0430	6.6192	1.7518	0.0400	1.7917		6,212.7697	6,212.7697	0.4038	0.2478	6,296.7176
Total	**8.9369**	**3.4483**	**43.7952**	**0.0656**	**6.5761**	**0.1829**	**6.7590**	**1.7518**	**0.1798**	**1.9316**	**0.0000**	**7,003.6924**	**7,003.6924**	**0.4472**	**0.2618**	**7,092.8816**

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	6.1959	0.2235	16.5493	1.0900e-003		0.0943	0.0943		0.0943	0.0943	0.0000	72.1721	72.1721	0.0296	7.8000e-004	73.1421
Energy	0.0659	0.5630	0.2396	3.5900e-003		0.0455	0.0455		0.0455	0.0455		718.7507	718.7507	0.0138	0.0132	723.0219
Mobile	2.6751	2.6618	27.0063	0.0609	6.5761	0.0430	6.6192	1.7518	0.0400	1.7917		6,212.7697	6,212.7697	0.4038	0.2478	6,296.7176
Total	**8.9369**	**3.4483**	**43.7952**	**0.0656**	**6.5761**	**0.1829**	**6.7590**	**1.7518**	**0.1798**	**1.9316**	**0.0000**	**7,003.6924**	**7,003.6924**	**0.4472**	**0.2618**	**7,092.8816**

Del Amo Circle Apt - Los Angeles-South Coast County, Summer

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	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	8/14/2023	9/6/2023	5	18	
2	Site Preparation	Site Preparation	9/7/2023	9/18/2023	5	8	
3	Grading	Grading	9/19/2023	12/8/2023	5	59	
4	Building Construction	Building Construction	12/9/2023	11/28/2025	5	515	
5	Paving	Paving	11/15/2025	12/15/2025	5	21	
6	Architectural Coating	Architectural Coating	10/29/2025	11/28/2025	5	23	

Acres of Grading (Site Preparation Phase): 12

Acres of Grading (Grading Phase): 59

Acres of Paving: 1.85

Residential Indoor: 487,126; Residential Outdoor: 162,375; Non-Residential Indoor: 254,919; Non-Residential Outdoor: 84,973; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74

Del Amo Circle Apt - Los Angeles-South Coast County, Summer

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

Grading	Graders	1	8.00	187	0.41
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Site Preparation	Scrapers	1	8.00	367	0.48
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45

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	5	13.00	4.00	321.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	10.00	62.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	10.00	1,338.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	228.00	54.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	46.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

Del Amo Circle Apt - Los Angeles-South Coast County, Summer

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

3.2 Demolition - 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					3.8637	0.0000	3.8637	0.5850	0.0000	0.5850			0.0000			0.0000
Off-Road	1.4725	14.3184	13.4577	0.0241		0.6766	0.6766		0.6328	0.6328		2,324.3959	2,324.3959	0.5893		2,339.1278
Total	**1.4725**	**14.3184**	**13.4577**	**0.0241**	**3.8637**	**0.6766**	**4.5404**	**0.5850**	**0.6328**	**1.2178**		**2,324.3959**	**2,324.3959**	**0.5893**		**2,339.1278**

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	0.0387	2.3271	0.6211	0.0104	0.3122	0.0147	0.3268	0.0856	0.0140	0.0996		1,146.0772	1,146.0772	0.0632	0.1820	1,201.8909
Vendor	4.6100e-003	0.1535	0.0595	7.4000e-004	0.0256	7.7000e-004	0.0264	7.3800e-003	7.4000e-004	8.1200e-003		80.1130	80.1130	2.6800e-003	0.0115	83.6124
Worker	0.0416	0.0290	0.4698	1.2900e-003	0.1453	8.7000e-004	0.1462	0.0385	8.0000e-004	0.0393		130.0098	130.0098	3.2800e-003	3.0000e-003	130.9859
Total	**0.0849**	**2.5096**	**1.1504**	**0.0125**	**0.4831**	**0.0163**	**0.4994**	**0.1315**	**0.0156**	**0.1471**		**1,356.2000**	**1,356.2000**	**0.0691**	**0.1965**	**1,416.4892**

Del Amo Circle Apt - Los Angeles-South Coast County, Summer

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					1.6517	0.0000	1.6517	0.2501	0.0000	0.2501			0.0000			0.0000
Off-Road	1.4725	14.3184	13.4577	0.0241		0.6766	0.6766		0.6328	0.6328	0.0000	2,324.3959	2,324.3959	0.5893		2,339.1278
Total	**1.4725**	**14.3184**	**13.4577**	**0.0241**	**1.6517**	**0.6766**	**2.3284**	**0.2501**	**0.6328**	**0.8829**	**0.0000**	**2,324.3959**	**2,324.3959**	**0.5893**		**2,339.1278**

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	0.0387	2.3271	0.6211	0.0104	0.2909	0.0147	0.3056	0.0804	0.0140	0.0944		1,146.0772	1,146.0772	0.0632	0.1820	1,201.8909
Vendor	4.6100e-003	0.1535	0.0595	7.4000e-004	0.0240	7.7000e-004	0.0248	6.9700e-003	7.4000e-004	7.7100e-003		80.1130	80.1130	2.6800e-003	0.0115	83.6124
Worker	0.0416	0.0290	0.4698	1.2900e-003	0.1339	8.7000e-004	0.1348	0.0358	8.0000e-004	0.0366		130.0098	130.0098	3.2800e-003	3.0000e-003	130.9859
Total	**0.0849**	**2.5096**	**1.1504**	**0.0125**	**0.4489**	**0.0163**	**0.4652**	**0.1231**	**0.0156**	**0.1387**		**1,356.2000**	**1,356.2000**	**0.0691**	**0.1965**	**1,416.4892**

Del Amo Circle Apt - Los Angeles-South Coast County, Summer

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

3.3 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.5978	0.0000	1.5978	0.1728	0.0000	0.1728			0.0000			0.0000
Off-Road	1.3027	14.2802	9.7820	0.0245		0.5419	0.5419		0.4985	0.4985		2,374.8634	2,374.8634	0.7681		2,394.0654
Total	**1.3027**	**14.2802**	**9.7820**	**0.0245**	**1.5978**	**0.5419**	**2.1397**	**0.1728**	**0.4985**	**0.6714**		**2,374.8634**	**2,374.8634**	**0.7681**		**2,394.0654**

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	0.0168	1.0113	0.2699	4.5300e-003	0.1357	6.3800e-003	0.1420	0.0372	6.1000e-003	0.0433		498.0616	498.0616	0.0275	0.0791	522.3171
Vendor	0.0115	0.3838	0.1487	1.8600e-003	0.0641	1.9300e-003	0.0660	0.0184	1.8500e-003	0.0203		200.2825	200.2825	6.7100e-003	0.0288	209.0311
Worker	0.0256	0.0179	0.2891	7.9000e-004	0.0894	5.4000e-004	0.0900	0.0237	5.0000e-004	0.0242		80.0060	80.0060	2.0200e-003	1.8500e-003	80.6067
Total	**0.0539**	**1.4130**	**0.7077**	**7.1800e-003**	**0.2891**	**8.8500e-003**	**0.2980**	**0.0793**	**8.4500e-003**	**0.0878**		**778.3501**	**778.3501**	**0.0362**	**0.1097**	**811.9549**

Del Amo Circle Apt - Los Angeles-South Coast County, Summer

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					0.6831	0.0000	0.6831	0.0739	0.0000	0.0739			0.0000			0.0000
Off-Road	1.3027	14.2802	9.7820	0.0245		0.5419	0.5419		0.4985	0.4985	0.0000	2,374.8634	2,374.8634	0.7681		2,394.0654
Total	**1.3027**	**14.2802**	**9.7820**	**0.0245**	**0.6831**	**0.5419**	**1.2250**	**0.0739**	**0.4985**	**0.5724**	**0.0000**	**2,374.8634**	**2,374.8634**	**0.7681**		**2,394.0654**

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	0.0168	1.0113	0.2699	4.5300e-003	0.1264	6.3800e-003	0.1328	0.0349	6.1000e-003	0.0410		498.0616	498.0616	0.0275	0.0791	522.3171
Vendor	0.0115	0.3838	0.1487	1.8600e-003	0.0600	1.9300e-003	0.0619	0.0174	1.8500e-003	0.0193		200.2825	200.2825	6.7100e-003	0.0288	209.0311
Worker	0.0256	0.0179	0.2891	7.9000e-004	0.0824	5.4000e-004	0.0830	0.0220	5.0000e-004	0.0225		80.0060	80.0060	2.0200e-003	1.8500e-003	80.6067
Total	**0.0539**	**1.4130**	**0.7077**	**7.1800e-003**	**0.2688**	**8.8500e-003**	**0.2777**	**0.0744**	**8.4500e-003**	**0.0828**		**778.3501**	**778.3501**	**0.0362**	**0.1097**	**811.9549**

Del Amo Circle Apt - Los Angeles-South Coast County, Summer

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

3.4 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					7.1031	0.0000	7.1031	3.4278	0.0000	3.4278			0.0000			0.0000
Off-Road	1.3330	14.4676	8.7038	0.0206		0.6044	0.6044		0.5560	0.5560		1,995.6147	1,995.6147	0.6454		2,011.7503
Total	**1.3330**	**14.4676**	**8.7038**	**0.0206**	**7.1031**	**0.6044**	**7.7075**	**3.4278**	**0.5560**	**3.9838**		**1,995.6147**	**1,995.6147**	**0.6454**		**2,011.7503**

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	0.0492	2.9592	0.7898	0.0133	0.3970	0.0187	0.4156	0.1088	0.0179	0.1267		1,457.4224	1,457.4224	0.0803	0.2314	1,528.3985
Vendor	0.0115	0.3838	0.1487	1.8600e-003	0.0641	1.9300e-003	0.0660	0.0184	1.8500e-003	0.0203		200.2825	200.2825	6.7100e-003	0.0288	209.0311
Worker	0.0320	0.0223	0.3614	9.9000e-004	0.1118	6.7000e-004	0.1125	0.0296	6.2000e-004	0.0303		100.0075	100.0075	2.5200e-003	2.3100e-003	100.7583
Total	**0.0927**	**3.3654**	**1.2999**	**0.0161**	**0.5728**	**0.0213**	**0.5941**	**0.1569**	**0.0203**	**0.1772**		**1,757.7124**	**1,757.7124**	**0.0896**	**0.2625**	**1,838.1880**

Del Amo Circle Apt - Los Angeles-South Coast County, Summer

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					3.0366	0.0000	3.0366	1.4654	0.0000	1.4654			0.0000			0.0000
Off-Road	1.3330	14.4676	8.7038	0.0206		0.6044	0.6044		0.5560	0.5560	0.0000	1,995.6147	1,995.6147	0.6454		2,011.7503
Total	**1.3330**	**14.4676**	**8.7038**	**0.0206**	**3.0366**	**0.6044**	**3.6409**	**1.4654**	**0.5560**	**2.0214**	**0.0000**	**1,995.6147**	**1,995.6147**	**0.6454**		**2,011.7503**

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	0.0492	2.9592	0.7898	0.0133	0.3700	0.0187	0.3886	0.1022	0.0179	0.1201		1,457.4224	1,457.4224	0.0803	0.2314	1,528.3985
Vendor	0.0115	0.3838	0.1487	1.8600e-003	0.0600	1.9300e-003	0.0619	0.0174	1.8500e-003	0.0193		200.2825	200.2825	6.7100e-003	0.0288	209.0311
Worker	0.0320	0.0223	0.3614	9.9000e-004	0.1030	6.7000e-004	0.1037	0.0275	6.2000e-004	0.0281		100.0075	100.0075	2.5200e-003	2.3100e-003	100.7583
Total	**0.0927**	**3.3654**	**1.2999**	**0.0161**	**0.5330**	**0.0213**	**0.5542**	**0.1472**	**0.0203**	**0.1675**		**1,757.7124**	**1,757.7124**	**0.0896**	**0.2625**	**1,838.1880**

Del Amo Circle Apt - Los Angeles-South Coast County, Summer

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

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	1.7136	13.6239	14.2145	0.0250		0.6136	0.6136		0.5880	0.5880		2,289.5233	2,289.5233	0.4330		2,300.3479
Total	**1.7136**	**13.6239**	**14.2145**	**0.0250**		**0.6136**	**0.6136**		**0.5880**	**0.5880**		**2,289.5233**	**2,289.5233**	**0.4330**		**2,300.3479**

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		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0622	2.0727	0.8030	0.0101	0.3459	0.0104	0.3563	0.0996	9.9700e-003	0.1096		1,081.5254	1,081.5254	0.0362	0.1555	1,128.7680
Worker	0.7297	0.5087	8.2399	0.0226	2.5485	0.0153	2.5638	0.6759	0.0141	0.6900		2,280.1719	2,280.1719	0.0575	0.0526	2,297.2903
Total	**0.7918**	**2.5814**	**9.0429**	**0.0326**	**2.8944**	**0.0258**	**2.9201**	**0.7755**	**0.0241**	**0.7996**		**3,361.6972**	**3,361.6972**	**0.0937**	**0.2081**	**3,426.0582**

Del Amo Circle Apt - Los Angeles-South Coast County, Summer

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	1.7136	13.6239	14.2145	0.0250		0.6136	0.6136		0.5880	0.5880	0.0000	2,289.5233	2,289.5233	0.4330		2,300.3479
Total	**1.7136**	**13.6239**	**14.2145**	**0.0250**		**0.6136**	**0.6136**		**0.5880**	**0.5880**	**0.0000**	**2,289.5233**	**2,289.5233**	**0.4330**		**2,300.3479**

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		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0622	2.0727	0.8030	0.0101	0.3237	0.0104	0.3341	0.0942	9.9700e-003	0.1041		1,081.5254	1,081.5254	0.0362	0.1555	1,128.7680
Worker	0.7297	0.5087	8.2399	0.0226	2.3491	0.0153	2.3644	0.6269	0.0141	0.6410		2,280.1719	2,280.1719	0.0575	0.0526	2,297.2903
Total	**0.7918**	**2.5814**	**9.0429**	**0.0326**	**2.6728**	**0.0258**	**2.6986**	**0.7211**	**0.0241**	**0.7452**		**3,361.6972**	**3,361.6972**	**0.0937**	**0.2081**	**3,426.0582**

Del Amo Circle Apt - Los Angeles-South Coast County, Summer

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

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	1.5971	12.8235	14.1002	0.0250		0.5381	0.5381		0.5153	0.5153		2,289.6541	2,289.6541	0.4265		2,300.3154
Total	**1.5971**	**12.8235**	**14.1002**	**0.0250**		**0.5381**	**0.5381**		**0.5153**	**0.5153**		**2,289.6541**	**2,289.6541**	**0.4265**		**2,300.3154**

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		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0603	2.0769	0.7859	9.8900e-003	0.3459	0.0105	0.3564	0.0996	0.0100	0.1096		1,065.2829	1,065.2829	0.0364	0.1533	1,111.8816
Worker	0.6798	0.4540	7.6568	0.0219	2.5485	0.0147	2.5632	0.6759	0.0135	0.6894		2,215.5446	2,215.5446	0.0520	0.0489	2,231.4279
Total	**0.7401**	**2.5309**	**8.4427**	**0.0318**	**2.8944**	**0.0252**	**2.9196**	**0.7755**	**0.0235**	**0.7990**		**3,280.8275**	**3,280.8275**	**0.0884**	**0.2023**	**3,343.3096**

Del Amo Circle Apt - Los Angeles-South Coast County, Summer

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	1.5971	12.8235	14.1002	0.0250		0.5381	0.5381		0.5153	0.5153	0.0000	2,289.6541	2,289.6541	0.4265		2,300.3154
Total	**1.5971**	**12.8235**	**14.1002**	**0.0250**		**0.5381**	**0.5381**		**0.5153**	**0.5153**	**0.0000**	**2,289.6541**	**2,289.6541**	**0.4265**		**2,300.3154**

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		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0603	2.0769	0.7859	9.8900e-003	0.3237	0.0105	0.3342	0.0942	0.0100	0.1042		1,065.2829	1,065.2829	0.0364	0.1533	1,111.8816
Worker	0.6798	0.4540	7.6568	0.0219	2.3491	0.0147	2.3638	0.6269	0.0135	0.6404		2,215.5446	2,215.5446	0.0520	0.0489	2,231.4279
Total	**0.7401**	**2.5309**	**8.4427**	**0.0318**	**2.6728**	**0.0252**	**2.6980**	**0.7211**	**0.0235**	**0.7446**		**3,280.8275**	**3,280.8275**	**0.0884**	**0.2023**	**3,343.3096**

Del Amo Circle Apt - Los Angeles-South Coast County, Summer

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

3.5 Building Construction - 2025

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	1.4897	12.0233	14.0072	0.0250		0.4700	0.4700		0.4498	0.4498		2,289.8898	2,289.8898	0.4200		2,300.3887
Total	**1.4897**	**12.0233**	**14.0072**	**0.0250**		**0.4700**	**0.4700**		**0.4498**	**0.4498**		**2,289.8898**	**2,289.8898**	**0.4200**		**2,300.3887**

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		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0586	2.0671	0.7715	9.7000e-003	0.3459	0.0105	0.3564	0.0996	0.0101	0.1097		1,046.1036	1,046.1036	0.0366	0.1507	1,091.9180
Worker	0.6355	0.4077	7.1211	0.0212	2.5485	0.0140	2.5625	0.6759	0.0129	0.6887		2,140.0705	2,140.0705	0.0469	0.0457	2,154.8636
Total	**0.6940**	**2.4748**	**7.8926**	**0.0309**	**2.8944**	**0.0245**	**2.9189**	**0.7755**	**0.0229**	**0.7984**		**3,186.1740**	**3,186.1740**	**0.0835**	**0.1964**	**3,246.7816**

Del Amo Circle Apt - Los Angeles-South Coast County, Summer

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	1.4897	12.0233	14.0072	0.0250		0.4700	0.4700		0.4498	0.4498	0.0000	2,289.8898	2,289.8898	0.4200		2,300.3887
Total	**1.4897**	**12.0233**	**14.0072**	**0.0250**		**0.4700**	**0.4700**		**0.4498**	**0.4498**	**0.0000**	**2,289.8898**	**2,289.8898**	**0.4200**		**2,300.3887**

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		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0586	2.0671	0.7715	9.7000e-003	0.3237	0.0105	0.3343	0.0942	0.0101	0.1042		1,046.1036	1,046.1036	0.0366	0.1507	1,091.9180
Worker	0.6355	0.4077	7.1211	0.0212	2.3491	0.0140	2.3631	0.6269	0.0129	0.6398		2,140.0705	2,140.0705	0.0469	0.0457	2,154.8636
Total	**0.6940**	**2.4748**	**7.8926**	**0.0309**	**2.6728**	**0.0245**	**2.6973**	**0.7211**	**0.0229**	**0.7440**		**3,186.1740**	**3,186.1740**	**0.0835**	**0.1964**	**3,246.7816**

Del Amo Circle Apt - Los Angeles-South Coast County, Summer

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

3.6 Paving - 2025

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	0.7854	7.4371	11.6737	0.0179		0.3503	0.3503		0.3234	0.3234		1,710.0067	1,710.0067	0.5420		1,723.5556
Paving	0.0561					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.8416**	**7.4371**	**11.6737**	**0.0179**		**0.3503**	**0.3503**		**0.3234**	**0.3234**		**1,710.0067**	**1,710.0067**	**0.5420**		**1,723.5556**

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		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0418	0.0268	0.4685	1.3900e-003	0.1677	9.2000e-004	0.1686	0.0445	8.5000e-004	0.0453		140.7941	140.7941	3.0900e-003	3.0100e-003	141.7673
Total	**0.0418**	**0.0268**	**0.4685**	**1.3900e-003**	**0.1677**	**9.2000e-004**	**0.1686**	**0.0445**	**8.5000e-004**	**0.0453**		**140.7941**	**140.7941**	**3.0900e-003**	**3.0100e-003**	**141.7673**

Del Amo Circle Apt - Los Angeles-South Coast County, Summer

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	0.7854	7.4371	11.6737	0.0179		0.3503	0.3503		0.3234	0.3234	0.0000	1,710.0067	1,710.0067	0.5420		1,723.5556
Paving	0.0561					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.8416**	**7.4371**	**11.6737**	**0.0179**		**0.3503**	**0.3503**		**0.3234**	**0.3234**	**0.0000**	**1,710.0067**	**1,710.0067**	**0.5420**		**1,723.5556**

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		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0418	0.0268	0.4685	1.3900e-003	0.1546	9.2000e-004	0.1555	0.0413	8.5000e-004	0.0421		140.7941	140.7941	3.0900e-003	3.0100e-003	141.7673
Total	**0.0418**	**0.0268**	**0.4685**	**1.3900e-003**	**0.1546**	**9.2000e-004**	**0.1555**	**0.0413**	**8.5000e-004**	**0.0421**		**140.7941**	**140.7941**	**3.0900e-003**	**3.0100e-003**	**141.7673**

Del Amo Circle Apt - Los Angeles-South Coast County, Summer

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

3.7 Architectural Coating - 2025

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	136.2294					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
Total	**136.4003**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**		**281.4481**	**281.4481**	**0.0154**		**281.8319**

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		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1282	0.0823	1.4367	4.2700e-003	0.5142	2.8200e-003	0.5170	0.1364	2.5900e-003	0.1390		431.7686	431.7686	9.4600e-003	9.2200e-003	434.7532
Total	**0.1282**	**0.0823**	**1.4367**	**4.2700e-003**	**0.5142**	**2.8200e-003**	**0.5170**	**0.1364**	**2.5900e-003**	**0.1390**		**431.7686**	**431.7686**	**9.4600e-003**	**9.2200e-003**	**434.7532**

Del Amo Circle Apt - Los Angeles-South Coast County, Summer

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					
Archit. Coating	136.2294					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515	0.0000	281.4481	281.4481	0.0154		281.8319
Total	**136.4003**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**	**0.0000**	**281.4481**	**281.4481**	**0.0154**		**281.8319**

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		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1282	0.0823	1.4367	4.2700e-003	0.4739	2.8200e-003	0.4768	0.1265	2.5900e-003	0.1291		431.7686	431.7686	9.4600e-003	9.2200e-003	434.7532
Total	**0.1282**	**0.0823**	**1.4367**	**4.2700e-003**	**0.4739**	**2.8200e-003**	**0.4768**	**0.1265**	**2.5900e-003**	**0.1291**		**431.7686**	**431.7686**	**9.4600e-003**	**9.2200e-003**	**434.7532**

Del Amo Circle Apt - Los Angeles-South Coast County, Summer

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	lb/day										lb/day					
Mitigated	2.6751	2.6618	27.0063	0.0609	6.5761	0.0430	6.6192	1.7518	0.0400	1.7917		6,212.7697	6,212.7697	0.4038	0.2478	6,296.7176
Unmitigated	2.6751	2.6618	27.0063	0.0609	6.5761	0.0430	6.6192	1.7518	0.0400	1.7917		6,212.7697	6,212.7697	0.4038	0.2478	6,296.7176

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	908.00	914.00	754.00	3,030,526	3,030,526
Enclosed Parking with Elevator	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	908.00	914.00	754.00	3,030,526	3,030,526

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

Del Amo Circle Apt - Los Angeles-South Coast County, Summer

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

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	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
Enclosed Parking with Elevator	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
Other Asphalt Surfaces	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
Other Non-Asphalt Surfaces	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	lb/day										lb/day					
NaturalGas Mitigated	0.0659	0.5630	0.2396	3.5900e-003		0.0455	0.0455		0.0455	0.0455		718.7507	718.7507	0.0138	0.0132	723.0219
NaturalGas Unmitigated	0.0659	0.5630	0.2396	3.5900e-003		0.0455	0.0455		0.0455	0.0455		718.7507	718.7507	0.0138	0.0132	723.0219

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	lb/day										lb/day					
Apartments Mid Rise	6109.38	0.0659	0.5630	0.2396	3.5900e-003		0.0455	0.0455		0.0455	0.0455		718.7507	718.7507	0.0138	0.0132	723.0219
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0659**	**0.5630**	**0.2396**	**3.5900e-003**		**0.0455**	**0.0455**		**0.0455**	**0.0455**		**718.7507**	**718.7507**	**0.0138**	**0.0132**	**723.0219**

Del Amo Circle Apt - Los Angeles-South Coast County, Summer

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

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	lb/day										lb/day					
Apartments Mid Rise	6.10938	0.0659	0.5630	0.2396	3.5900e-003		0.0455	0.0455		0.0455	0.0455		718.7507	718.7507	0.0138	0.0132	723.0219
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0659**	**0.5630**	**0.2396**	**3.5900e-003**		**0.0455**	**0.0455**		**0.0455**	**0.0455**		**718.7507**	**718.7507**	**0.0138**	**0.0132**	**723.0219**

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	6.1959	0.2235	16.5493	1.0900e-003		0.0943	0.0943		0.0943	0.0943	0.0000	72.1721	72.1721	0.0296	7.8000e-004	73.1421
Unmitigated	6.1959	0.2235	16.5493	1.0900e-003		0.0943	0.0943		0.0943	0.0943	0.0000	72.1721	72.1721	0.0296	7.8000e-004	73.1421

Del Amo Circle Apt - Los Angeles-South Coast County, Summer

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

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	0.8584					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.8340					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	3.8800e-003	0.0332	0.0141	2.1000e-004		2.6800e-003	2.6800e-003		2.6800e-003	2.6800e-003	0.0000	42.3529	42.3529	8.1000e-004	7.8000e-004	42.6046
Landscaping	0.4996	0.1903	16.5352	8.8000e-004		0.0917	0.0917		0.0917	0.0917		29.8191	29.8191	0.0287		30.5375
Total	**6.1959**	**0.2235**	**16.5493**	**1.0900e-003**		**0.0943**	**0.0943**		**0.0943**	**0.0943**	**0.0000**	**72.1721**	**72.1721**	**0.0295**	**7.8000e-004**	**73.1421**

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	0.8584					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.8340					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	3.8800e-003	0.0332	0.0141	2.1000e-004		2.6800e-003	2.6800e-003		2.6800e-003	2.6800e-003	0.0000	42.3529	42.3529	8.1000e-004	7.8000e-004	42.6046
Landscaping	0.4996	0.1903	16.5352	8.8000e-004		0.0917	0.0917		0.0917	0.0917		29.8191	29.8191	0.0287		30.5375
Total	**6.1959**	**0.2235**	**16.5493**	**1.0900e-003**		**0.0943**	**0.0943**		**0.0943**	**0.0943**	**0.0000**	**72.1721**	**72.1721**	**0.0295**	**7.8000e-004**	**73.1421**

Del Amo Circle Apt - Los Angeles-South Coast County, Summer

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

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Del Amo Circle Apt - 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

Del Amo Circle Apt

Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Mid Rise	200.00	Dwelling Unit	1.08	240,556.00	572
Enclosed Parking with Elevator	440.00	Space	0.55	169,946.00	0
Other Asphalt Surfaces	19.40	1000sqft	0.45	19,400.00	0
Other Non-Asphalt Surfaces	37.11	1000sqft	0.85	11,011.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	8			**Operational Year**	2025
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	449.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Based on the CO2e intensity of 452 lbs/MWh per the Southern California Edison 2021 Sustainability Report.

Land Use - Based on information provided by the applicant.

Construction Phase - Based on information provided/verified by the Applicant and CalEEMod defaults.

Grading -

Demolition -

Trips and VMT - Assumes water trucks for demolition, site preparation, and grading. See assumptions in the AQ/GHG appendix.

Architectural Coating - Assumes architectural coating and striping of parking structure and striping of the proposed accessway. See assumptions in the AQ/GHG appendix.

Vehicle Trips - Based on information provided by LLG.

Woodstoves - Accounts for the two firepits for resident use. Assumes no wood stoves per South Coast AQMD Rule 445 and no fireplaces for dwelling units per the site plan.

Area Coating - Assumes architectural coating and striping for the parking structure and striping for the accessway.

Water And Wastewater - See assumptions in the AQ/GHG appendix.

Del Amo Circle Apt - 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

Construction Off-road Equipment Mitigation - Based on South Coast AQMD Rules 403 and 1186.

Water Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	0.00	84,973.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	0.00	254,919.00
tblArchitecturalCoating	ConstArea_Parking	12,021.00	11,361.00
tblAreaCoating	Area_Nonresidential_Exterior	0	84973
tblAreaCoating	Area_Nonresidential_Interior	0	254919
tblAreaCoating	Area_Parking	12021	11361
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	10.00	23.00
tblConstructionPhase	NumDays	220.00	515.00
tblConstructionPhase	NumDays	20.00	18.00
tblConstructionPhase	NumDays	6.00	59.00
tblConstructionPhase	NumDays	10.00	21.00
tblConstructionPhase	NumDays	3.00	8.00
tblConstructionPhase	PhaseEndDate	8/22/2024	11/28/2025
tblConstructionPhase	PhaseEndDate	7/25/2024	11/28/2025
tblConstructionPhase	PhaseEndDate	9/8/2023	9/6/2023
tblConstructionPhase	PhaseEndDate	9/21/2023	12/8/2023
tblConstructionPhase	PhaseEndDate	8/8/2024	12/15/2025
tblConstructionPhase	PhaseEndDate	9/13/2023	9/18/2023
tblConstructionPhase	PhaseStartDate	8/9/2024	10/29/2025
tblConstructionPhase	PhaseStartDate	9/22/2023	12/9/2023
tblConstructionPhase	PhaseStartDate	9/14/2023	9/19/2023
tblConstructionPhase	PhaseStartDate	7/26/2024	11/15/2025
tblConstructionPhase	PhaseStartDate	9/9/2023	9/7/2023
tblFireplaces	NumberGas	170.00	2.00
tblFireplaces	NumberNoFireplace	20.00	198.00

Del Amo Circle Apt - 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

tblFireplaces	NumberWood	10.00	0.00
tblGrading	MaterialExported	0.00	10,700.00
tblGrading	MaterialExported	0.00	500.00
tblLandUse	LandUseSquareFeet	200,000.00	240,556.00
tblLandUse	LandUseSquareFeet	176,000.00	169,946.00
tblLandUse	LandUseSquareFeet	37,111.00	11,011.00
tblLandUse	LotAcreage	5.26	1.08
tblLandUse	LotAcreage	3.96	0.55
tblProjectCharacteristics	CO2IntensityFactor	390.98	449.98
tblTripsAndVMT	HaulingTripNumber	63.00	62.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblVehicleTrips	ST_TR	4.91	4.57
tblVehicleTrips	SU_TR	4.09	3.77
tblVehicleTrips	WD_TR	5.44	4.54
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	IndoorWaterUseRate	13,030,805.12	15,389,130.00
tblWater	OutdoorWaterUseRate	8,215,072.80	317,217.00
tblWater	SepticTankPercent	10.33	0.00
tblWoodstoves	NumberCatalytic	10.00	0.00
tblWoodstoves	NumberNoncatalytic	10.00	0.00

Del Amo Circle Apt - 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

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

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	lb/day										lb/day					
2023	2.5576	17.9838	22.6165	0.0565	7.6759	0.6930	8.3016	3.5848	0.6484	4.1611	0.0000	5,532.8392	5,532.8392	0.8042	0.2630	5,609.2328
2024	2.3880	15.4994	21.9551	0.0557	2.8944	0.5633	3.4577	0.7755	0.5389	1.3143	0.0000	5,455.7158	5,455.7158	0.5155	0.2060	5,529.9828
2025	139.6590	23.3409	36.5966	0.0810	3.5762	0.9000	4.4762	0.9563	0.8511	1.8074	0.0000	7,899.4704	7,899.4704	1.0742	0.2129	7,989.7690
Maximum	**139.6590**	**23.3409**	**36.5966**	**0.0810**	**7.6759**	**0.9000**	**8.3016**	**3.5848**	**0.8511**	**4.1611**	**0.0000**	**7,899.4704**	**7,899.4704**	**1.0742**	**0.2630**	**7,989.7690**

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	lb/day										lb/day					
2023	2.5576	17.9838	22.6165	0.0565	3.5695	0.6930	4.1952	1.6126	0.6484	2.1889	0.0000	5,532.8392	5,532.8392	0.8042	0.2630	5,609.2328
2024	2.3880	15.4994	21.9551	0.0557	2.6728	0.5633	3.2361	0.7211	0.5389	1.2600	0.0000	5,455.7158	5,455.7158	0.5155	0.2060	5,529.9828
2025	139.6590	23.3409	36.5966	0.0810	3.3013	0.9000	4.2013	0.8888	0.8511	1.7399	0.0000	7,899.4704	7,899.4704	1.0742	0.2129	7,989.7690
Maximum	**139.6590**	**23.3409**	**36.5966**	**0.0810**	**3.5695**	**0.9000**	**4.2013**	**1.6126**	**0.8511**	**2.1889**	**0.0000**	**7,899.4704**	**7,899.4704**	**1.0742**	**0.2630**	**7,989.7690**

Del Amo Circle Apt - 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	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**32.54**	**0.00**	**28.35**	**39.39**	**0.00**	**28.75**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

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	6.1959	0.2235	16.5493	1.0900e-003		0.0943	0.0943		0.0943	0.0943	0.0000	72.1721	72.1721	0.0296	7.8000e-004	73.1421
Energy	0.0659	0.5630	0.2396	3.5900e-003		0.0455	0.0455		0.0455	0.0455		718.7507	718.7507	0.0138	0.0132	723.0219
Mobile	2.6279	2.8728	26.4579	0.0583	6.5761	0.0430	6.6192	1.7518	0.0400	1.7917		5,951.6712	5,951.6712	0.4147	0.2585	6,039.0774
Total	**8.8897**	**3.6593**	**43.2468**	**0.0630**	**6.5761**	**0.1829**	**6.7590**	**1.7518**	**0.1798**	**1.9316**	**0.0000**	**6,742.5940**	**6,742.5940**	**0.4581**	**0.2725**	**6,835.2413**

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	6.1959	0.2235	16.5493	1.0900e-003		0.0943	0.0943		0.0943	0.0943	0.0000	72.1721	72.1721	0.0296	7.8000e-004	73.1421
Energy	0.0659	0.5630	0.2396	3.5900e-003		0.0455	0.0455		0.0455	0.0455		718.7507	718.7507	0.0138	0.0132	723.0219
Mobile	2.6279	2.8728	26.4579	0.0583	6.5761	0.0430	6.6192	1.7518	0.0400	1.7917		5,951.6712	5,951.6712	0.4147	0.2585	6,039.0774
Total	**8.8897**	**3.6593**	**43.2468**	**0.0630**	**6.5761**	**0.1829**	**6.7590**	**1.7518**	**0.1798**	**1.9316**	**0.0000**	**6,742.5940**	**6,742.5940**	**0.4581**	**0.2725**	**6,835.2413**

Del Amo Circle Apt - 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	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	8/14/2023	9/6/2023	5	18	
2	Site Preparation	Site Preparation	9/7/2023	9/18/2023	5	8	
3	Grading	Grading	9/19/2023	12/8/2023	5	59	
4	Building Construction	Building Construction	12/9/2023	11/28/2025	5	515	
5	Paving	Paving	11/15/2025	12/15/2025	5	21	
6	Architectural Coating	Architectural Coating	10/29/2025	11/28/2025	5	23	

Acres of Grading (Site Preparation Phase): 12

Acres of Grading (Grading Phase): 59

Acres of Paving: 1.85

Residential Indoor: 487,126; Residential Outdoor: 162,375; Non-Residential Indoor: 254,919; Non-Residential Outdoor: 84,973; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74

Del Amo Circle Apt - 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

Grading	Graders	1	8.00	187	0.41
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Site Preparation	Scrapers	1	8.00	367	0.48
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45

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	5	13.00	4.00	321.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	10.00	62.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	10.00	1,338.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	228.00	54.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	46.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

Del Amo Circle Apt - 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

3.2 Demolition - 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					3.8637	0.0000	3.8637	0.5850	0.0000	0.5850			0.0000			0.0000
Off-Road	1.4725	14.3184	13.4577	0.0241		0.6766	0.6766		0.6328	0.6328		2,324.3959	2,324.3959	0.5893		2,339.1278
Total	**1.4725**	**14.3184**	**13.4577**	**0.0241**	**3.8637**	**0.6766**	**4.5404**	**0.5850**	**0.6328**	**1.2178**		**2,324.3959**	**2,324.3959**	**0.5893**		**2,339.1278**

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	0.0362	2.4297	0.6297	0.0104	0.3122	0.0147	0.3269	0.0856	0.0141	0.0997		1,147.2852	1,147.2852	0.0630	0.1822	1,203.1542
Vendor	4.4500e-003	0.1608	0.0614	7.5000e-004	0.0256	7.8000e-004	0.0264	7.3800e-003	7.4000e-004	8.1200e-003		80.2481	80.2481	2.6700e-003	0.0116	83.7564
Worker	0.0447	0.0320	0.4318	1.2200e-003	0.1453	8.7000e-004	0.1462	0.0385	8.0000e-004	0.0393		123.1560	123.1560	3.3200e-003	3.2000e-003	124.1941
Total	**0.0853**	**2.6225**	**1.1228**	**0.0124**	**0.4831**	**0.0164**	**0.4995**	**0.1315**	**0.0156**	**0.1471**		**1,350.6893**	**1,350.6893**	**0.0690**	**0.1969**	**1,411.1047**

Del Amo Circle Apt - 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					1.6517	0.0000	1.6517	0.2501	0.0000	0.2501			0.0000			0.0000
Off-Road	1.4725	14.3184	13.4577	0.0241		0.6766	0.6766		0.6328	0.6328	0.0000	2,324.3959	2,324.3959	0.5893		2,339.1278
Total	**1.4725**	**14.3184**	**13.4577**	**0.0241**	**1.6517**	**0.6766**	**2.3284**	**0.2501**	**0.6328**	**0.8829**	**0.0000**	**2,324.3959**	**2,324.3959**	**0.5893**		**2,339.1278**

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	0.0362	2.4297	0.6297	0.0104	0.2909	0.0147	0.3057	0.0804	0.0141	0.0945		1,147.2852	1,147.2852	0.0630	0.1822	1,203.1542
Vendor	4.4500e-003	0.1608	0.0614	7.5000e-004	0.0240	7.8000e-004	0.0248	6.9700e-003	7.4000e-004	7.7200e-003		80.2481	80.2481	2.6700e-003	0.0116	83.7564
Worker	0.0447	0.0320	0.4318	1.2200e-003	0.1339	8.7000e-004	0.1348	0.0358	8.0000e-004	0.0366		123.1560	123.1560	3.3200e-003	3.2000e-003	124.1941
Total	**0.0853**	**2.6225**	**1.1228**	**0.0124**	**0.4489**	**0.0164**	**0.4652**	**0.1231**	**0.0156**	**0.1387**		**1,350.6893**	**1,350.6893**	**0.0690**	**0.1969**	**1,411.1047**

Del Amo Circle Apt - 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

3.3 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.5978	0.0000	1.5978	0.1728	0.0000	0.1728			0.0000			0.0000
Off-Road	1.3027	14.2802	9.7820	0.0245		0.5419	0.5419		0.4985	0.4985		2,374.8634	2,374.8634	0.7681		2,394.0654
Total	**1.3027**	**14.2802**	**9.7820**	**0.0245**	**1.5978**	**0.5419**	**2.1397**	**0.1728**	**0.4985**	**0.6714**		**2,374.8634**	**2,374.8634**	**0.7681**		**2,394.0654**

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	0.0157	1.0559	0.2736	4.5400e-003	0.1357	6.4000e-003	0.1421	0.0372	6.1200e-003	0.0433		498.5866	498.5866	0.0274	0.0792	522.8661
Vendor	0.0111	0.4019	0.1534	1.8600e-003	0.0641	1.9400e-003	0.0660	0.0184	1.8600e-003	0.0203		200.6203	200.6203	6.6800e-003	0.0289	209.3911
Worker	0.0275	0.0197	0.2658	7.5000e-004	0.0894	5.4000e-004	0.0900	0.0237	5.0000e-004	0.0242		75.7883	75.7883	2.0500e-003	1.9700e-003	76.4271
Total	**0.0544**	**1.4775**	**0.6928**	**7.1500e-003**	**0.2891**	**8.8800e-003**	**0.2980**	**0.0793**	**8.4800e-003**	**0.0878**		**774.9952**	**774.9952**	**0.0361**	**0.1100**	**808.6843**

Del Amo Circle Apt - 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					0.6831	0.0000	0.6831	0.0739	0.0000	0.0739			0.0000			0.0000
Off-Road	1.3027	14.2802	9.7820	0.0245		0.5419	0.5419		0.4985	0.4985	0.0000	2,374.8634	2,374.8634	0.7681		2,394.0654
Total	**1.3027**	**14.2802**	**9.7820**	**0.0245**	**0.6831**	**0.5419**	**1.2250**	**0.0739**	**0.4985**	**0.5724**	**0.0000**	**2,374.8634**	**2,374.8634**	**0.7681**		**2,394.0654**

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	0.0157	1.0559	0.2736	4.5400e-003	0.1264	6.4000e-003	0.1328	0.0349	6.1200e-003	0.0411		498.5866	498.5866	0.0274	0.0792	522.8661
Vendor	0.0111	0.4019	0.1534	1.8600e-003	0.0600	1.9400e-003	0.0619	0.0174	1.8600e-003	0.0193		200.6203	200.6203	6.6800e-003	0.0289	209.3911
Worker	0.0275	0.0197	0.2658	7.5000e-004	0.0824	5.4000e-004	0.0830	0.0220	5.0000e-004	0.0225		75.7883	75.7883	2.0500e-003	1.9700e-003	76.4271
Total	**0.0544**	**1.4775**	**0.6928**	**7.1500e-003**	**0.2688**	**8.8800e-003**	**0.2777**	**0.0744**	**8.4800e-003**	**0.0828**		**774.9952**	**774.9952**	**0.0361**	**0.1100**	**808.6843**

Del Amo Circle Apt - 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

3.4 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					7.1031	0.0000	7.1031	3.4278	0.0000	3.4278			0.0000			0.0000
Off-Road	1.3330	14.4676	8.7038	0.0206		0.6044	0.6044		0.5560	0.5560		1,995.6147	1,995.6147	0.6454		2,011.7503
Total	**1.3330**	**14.4676**	**8.7038**	**0.0206**	**7.1031**	**0.6044**	**7.7075**	**3.4278**	**0.5560**	**3.9838**		**1,995.6147**	**1,995.6147**	**0.6454**		**2,011.7503**

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	0.0460	3.0897	0.8007	0.0133	0.3970	0.0187	0.4157	0.1088	0.0179	0.1267		1,458.9586	1,458.9586	0.0802	0.2317	1,530.0050
Vendor	0.0111	0.4019	0.1534	1.8600e-003	0.0641	1.9400e-003	0.0660	0.0184	1.8600e-003	0.0203		200.6203	200.6203	6.6800e-003	0.0289	209.3911
Worker	0.0344	0.0246	0.3322	9.4000e-004	0.1118	6.7000e-004	0.1125	0.0296	6.2000e-004	0.0303		94.7354	94.7354	2.5600e-003	2.4700e-003	95.5339
Total	**0.0915**	**3.5162**	**1.2863**	**0.0161**	**0.5728**	**0.0213**	**0.5941**	**0.1569**	**0.0204**	**0.1773**		**1,754.3143**	**1,754.3143**	**0.0894**	**0.2630**	**1,834.9300**

Del Amo Circle Apt - 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					3.0366	0.0000	3.0366	1.4654	0.0000	1.4654			0.0000			0.0000
Off-Road	1.3330	14.4676	8.7038	0.0206		0.6044	0.6044		0.5560	0.5560	0.0000	1,995.6147	1,995.6147	0.6454		2,011.7503
Total	**1.3330**	**14.4676**	**8.7038**	**0.0206**	**3.0366**	**0.6044**	**3.6409**	**1.4654**	**0.5560**	**2.0214**	**0.0000**	**1,995.6147**	**1,995.6147**	**0.6454**		**2,011.7503**

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	0.0460	3.0897	0.8007	0.0133	0.3700	0.0187	0.3887	0.1022	0.0179	0.1201		1,458.9586	1,458.9586	0.0802	0.2317	1,530.0050
Vendor	0.0111	0.4019	0.1534	1.8600e-003	0.0600	1.9400e-003	0.0619	0.0174	1.8600e-003	0.0193		200.6203	200.6203	6.6800e-003	0.0289	209.3911
Worker	0.0344	0.0246	0.3322	9.4000e-004	0.1030	6.7000e-004	0.1037	0.0275	6.2000e-004	0.0281		94.7354	94.7354	2.5600e-003	2.4700e-003	95.5339
Total	**0.0915**	**3.5162**	**1.2863**	**0.0161**	**0.5330**	**0.0213**	**0.5543**	**0.1472**	**0.0204**	**0.1675**		**1,754.3143**	**1,754.3143**	**0.0894**	**0.2630**	**1,834.9300**

Del Amo Circle Apt - 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

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	1.7136	13.6239	14.2145	0.0250		0.6136	0.6136		0.5880	0.5880		2,289.5233	2,289.5233	0.4330		2,300.3479
Total	**1.7136**	**13.6239**	**14.2145**	**0.0250**		**0.6136**	**0.6136**		**0.5880**	**0.5880**		**2,289.5233**	**2,289.5233**	**0.4330**		**2,300.3479**

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		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0600	2.1701	0.8282	0.0101	0.3459	0.0105	0.3564	0.0996	0.0100	0.1096		1,083.3496	1,083.3496	0.0361	0.1559	1,130.7120
Worker	0.7840	0.5619	7.5738	0.0214	2.5485	0.0153	2.5638	0.6759	0.0141	0.6900		2,159.9662	2,159.9662	0.0583	0.0562	2,178.1730
Total	**0.8440**	**2.7320**	**8.4020**	**0.0314**	**2.8944**	**0.0258**	**2.9202**	**0.7755**	**0.0241**	**0.7996**		**3,243.3159**	**3,243.3159**	**0.0944**	**0.2121**	**3,308.8849**

Del Amo Circle Apt - 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	1.7136	13.6239	14.2145	0.0250		0.6136	0.6136		0.5880	0.5880	0.0000	2,289.5233	2,289.5233	0.4330		2,300.3479
Total	**1.7136**	**13.6239**	**14.2145**	**0.0250**		**0.6136**	**0.6136**		**0.5880**	**0.5880**	**0.0000**	**2,289.5233**	**2,289.5233**	**0.4330**		**2,300.3479**

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		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0600	2.1701	0.8282	0.0101	0.3237	0.0105	0.3342	0.0942	0.0100	0.1042		1,083.3496	1,083.3496	0.0361	0.1559	1,130.7120
Worker	0.7840	0.5619	7.5738	0.0214	2.3491	0.0153	2.3644	0.6269	0.0141	0.6410		2,159.9662	2,159.9662	0.0583	0.0562	2,178.1730
Total	**0.8440**	**2.7320**	**8.4020**	**0.0314**	**2.6728**	**0.0258**	**2.6986**	**0.7211**	**0.0241**	**0.7452**		**3,243.3159**	**3,243.3159**	**0.0944**	**0.2121**	**3,308.8849**

Del Amo Circle Apt - 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

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	1.5971	12.8235	14.1002	0.0250		0.5381	0.5381		0.5153	0.5153		2,289.6541	2,289.6541	0.4265		2,300.3154
Total	**1.5971**	**12.8235**	**14.1002**	**0.0250**		**0.5381**	**0.5381**		**0.5153**	**0.5153**		**2,289.6541**	**2,289.6541**	**0.4265**		**2,300.3154**

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		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0580	2.1745	0.8108	9.9100e-003	0.3459	0.0106	0.3565	0.0996	0.0101	0.1097		1,067.1174	1,067.1174	0.0362	0.1537	1,113.8323
Worker	0.7328	0.5014	7.0441	0.0208	2.5485	0.0147	2.5632	0.6759	0.0135	0.6894		2,098.9443	2,098.9443	0.0528	0.0523	2,115.8352
Total	**0.7909**	**2.6759**	**7.8549**	**0.0307**	**2.8944**	**0.0252**	**2.9196**	**0.7755**	**0.0236**	**0.7991**		**3,166.0617**	**3,166.0617**	**0.0890**	**0.2060**	**3,229.6674**

Del Amo Circle Apt - 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	1.5971	12.8235	14.1002	0.0250		0.5381	0.5381		0.5153	0.5153	0.0000	2,289.6541	2,289.6541	0.4265		2,300.3154
Total	**1.5971**	**12.8235**	**14.1002**	**0.0250**		**0.5381**	**0.5381**		**0.5153**	**0.5153**	**0.0000**	**2,289.6541**	**2,289.6541**	**0.4265**		**2,300.3154**

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		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0580	2.1745	0.8108	9.9100e-003	0.3237	0.0106	0.3343	0.0942	0.0101	0.1043		1,067.1174	1,067.1174	0.0362	0.1537	1,113.8323
Worker	0.7328	0.5014	7.0441	0.0208	2.3491	0.0147	2.3638	0.6269	0.0135	0.6404		2,098.9443	2,098.9443	0.0528	0.0523	2,115.8352
Total	**0.7909**	**2.6759**	**7.8549**	**0.0307**	**2.6728**	**0.0252**	**2.6981**	**0.7211**	**0.0236**	**0.7447**		**3,166.0617**	**3,166.0617**	**0.0890**	**0.2060**	**3,229.6674**

Del Amo Circle Apt - 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

3.5 Building Construction - 2025

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	1.4897	12.0233	14.0072	0.0250		0.4700	0.4700		0.4498	0.4498		2,289.8898	2,289.8898	0.4200		2,300.3887
Total	**1.4897**	**12.0233**	**14.0072**	**0.0250**		**0.4700**	**0.4700**		**0.4498**	**0.4498**		**2,289.8898**	**2,289.8898**	**0.4200**		**2,300.3887**

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		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0563	2.1644	0.7961	9.7200e-003	0.3459	0.0106	0.3565	0.0996	0.0101	0.1097		1,047.9374	1,047.9374	0.0365	0.1511	1,093.8647
Worker	0.6873	0.4501	6.5563	0.0201	2.5485	0.0140	2.5625	0.6759	0.0129	0.6887		2,027.6919	2,027.6919	0.0477	0.0488	2,043.4229
Total	**0.7436**	**2.6145**	**7.3524**	**0.0298**	**2.8944**	**0.0246**	**2.9190**	**0.7755**	**0.0230**	**0.7985**		**3,075.6293**	**3,075.6293**	**0.0841**	**0.1999**	**3,137.2876**

Del Amo Circle Apt - 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	1.4897	12.0233	14.0072	0.0250		0.4700	0.4700		0.4498	0.4498	0.0000	2,289.8898	2,289.8898	0.4200		2,300.3887
Total	**1.4897**	**12.0233**	**14.0072**	**0.0250**		**0.4700**	**0.4700**		**0.4498**	**0.4498**	**0.0000**	**2,289.8898**	**2,289.8898**	**0.4200**		**2,300.3887**

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		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0563	2.1644	0.7961	9.7200e-003	0.3237	0.0106	0.3343	0.0942	0.0101	0.1043		1,047.9374	1,047.9374	0.0365	0.1511	1,093.8647
Worker	0.6873	0.4501	6.5563	0.0201	2.3491	0.0140	2.3631	0.6269	0.0129	0.6398		2,027.6919	2,027.6919	0.0477	0.0488	2,043.4229
Total	**0.7436**	**2.6145**	**7.3524**	**0.0298**	**2.6728**	**0.0246**	**2.6974**	**0.7211**	**0.0230**	**0.7441**		**3,075.6293**	**3,075.6293**	**0.0841**	**0.1999**	**3,137.2876**

Del Amo Circle Apt - 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

3.6 Paving - 2025

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	0.7854	7.4371	11.6737	0.0179		0.3503	0.3503		0.3234	0.3234		1,710.0067	1,710.0067	0.5420		1,723.5556
Paving	0.0561					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.8416**	**7.4371**	**11.6737**	**0.0179**		**0.3503**	**0.3503**		**0.3234**	**0.3234**		**1,710.0067**	**1,710.0067**	**0.5420**		**1,723.5556**

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		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0452	0.0296	0.4313	1.3200e-003	0.1677	9.2000e-004	0.1686	0.0445	8.5000e-004	0.0453		133.4008	133.4008	3.1400e-003	3.2100e-003	134.4357
Total	**0.0452**	**0.0296**	**0.4313**	**1.3200e-003**	**0.1677**	**9.2000e-004**	**0.1686**	**0.0445**	**8.5000e-004**	**0.0453**		**133.4008**	**133.4008**	**3.1400e-003**	**3.2100e-003**	**134.4357**

Del Amo Circle Apt - 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	0.7854	7.4371	11.6737	0.0179		0.3503	0.3503		0.3234	0.3234	0.0000	1,710.0067	1,710.0067	0.5420		1,723.5556
Paving	0.0561					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.8416**	**7.4371**	**11.6737**	**0.0179**		**0.3503**	**0.3503**		**0.3234**	**0.3234**	**0.0000**	**1,710.0067**	**1,710.0067**	**0.5420**		**1,723.5556**

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		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0452	0.0296	0.4313	1.3200e-003	0.1546	9.2000e-004	0.1555	0.0413	8.5000e-004	0.0421		133.4008	133.4008	3.1400e-003	3.2100e-003	134.4357
Total	**0.0452**	**0.0296**	**0.4313**	**1.3200e-003**	**0.1546**	**9.2000e-004**	**0.1555**	**0.0413**	**8.5000e-004**	**0.0421**		**133.4008**	**133.4008**	**3.1400e-003**	**3.2100e-003**	**134.4357**

Del Amo Circle Apt - 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

3.7 Architectural Coating - 2025

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	136.2294					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
Total	**136.4003**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**		**281.4481**	**281.4481**	**0.0154**		**281.8319**

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		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1387	0.0908	1.3228	4.0500e-003	0.5142	2.8200e-003	0.5170	0.1364	2.5900e-003	0.1390		409.0957	409.0957	9.6200e-003	9.8400e-003	412.2695
Total	**0.1387**	**0.0908**	**1.3228**	**4.0500e-003**	**0.5142**	**2.8200e-003**	**0.5170**	**0.1364**	**2.5900e-003**	**0.1390**		**409.0957**	**409.0957**	**9.6200e-003**	**9.8400e-003**	**412.2695**

Del Amo Circle Apt - 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					
Archit. Coating	136.2294					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515	0.0000	281.4481	281.4481	0.0154		281.8319
Total	**136.4003**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**	**0.0000**	**281.4481**	**281.4481**	**0.0154**		**281.8319**

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		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1387	0.0908	1.3228	4.0500e-003	0.4739	2.8200e-003	0.4768	0.1265	2.5900e-003	0.1291		409.0957	409.0957	9.6200e-003	9.8400e-003	412.2695
Total	**0.1387**	**0.0908**	**1.3228**	**4.0500e-003**	**0.4739**	**2.8200e-003**	**0.4768**	**0.1265**	**2.5900e-003**	**0.1291**		**409.0957**	**409.0957**	**9.6200e-003**	**9.8400e-003**	**412.2695**

Del Amo Circle Apt - 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

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	lb/day										lb/day					
Mitigated	2.6279	2.8728	26.4579	0.0583	6.5761	0.0430	6.6192	1.7518	0.0400	1.7917		5,951.6712	5,951.6712	0.4147	0.2585	6,039.0774
Unmitigated	2.6279	2.8728	26.4579	0.0583	6.5761	0.0430	6.6192	1.7518	0.0400	1.7917		5,951.6712	5,951.6712	0.4147	0.2585	6,039.0774

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	908.00	914.00	754.00	3,030,526	3,030,526
Enclosed Parking with Elevator	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	908.00	914.00	754.00	3,030,526	3,030,526

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	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
Enclosed Parking with Elevator	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
Other Asphalt Surfaces	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
Other Non-Asphalt Surfaces	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

Del Amo Circle Apt - 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

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	lb/day										lb/day					
NaturalGas Mitigated	0.0659	0.5630	0.2396	3.5900e-003		0.0455	0.0455		0.0455	0.0455		718.7507	718.7507	0.0138	0.0132	723.0219
NaturalGas Unmitigated	0.0659	0.5630	0.2396	3.5900e-003		0.0455	0.0455		0.0455	0.0455		718.7507	718.7507	0.0138	0.0132	723.0219

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	lb/day										lb/day					
Apartments Mid Rise	6109.38	0.0659	0.5630	0.2396	3.5900e-003		0.0455	0.0455		0.0455	0.0455		718.7507	718.7507	0.0138	0.0132	723.0219
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0659**	**0.5630**	**0.2396**	**3.5900e-003**		**0.0455**	**0.0455**		**0.0455**	**0.0455**		**718.7507**	**718.7507**	**0.0138**	**0.0132**	**723.0219**

Del Amo Circle Apt - 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

	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	lb/day										lb/day					
Apartments Mid Rise	6.10938	0.0659	0.5630	0.2396	3.5900e-003		0.0455	0.0455		0.0455	0.0455		718.7507	718.7507	0.0138	0.0132	723.0219
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0659**	**0.5630**	**0.2396**	**3.5900e-003**		**0.0455**	**0.0455**		**0.0455**	**0.0455**		**718.7507**	**718.7507**	**0.0138**	**0.0132**	**723.0219**

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	6.1959	0.2235	16.5493	1.0900e-003		0.0943	0.0943		0.0943	0.0943	0.0000	72.1721	72.1721	0.0296	7.8000e-004	73.1421
Unmitigated	6.1959	0.2235	16.5493	1.0900e-003		0.0943	0.0943		0.0943	0.0943	0.0000	72.1721	72.1721	0.0296	7.8000e-004	73.1421

Del Amo Circle Apt - 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

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	0.8584					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.8340					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	3.8800e-003	0.0332	0.0141	2.1000e-004		2.6800e-003	2.6800e-003		2.6800e-003	2.6800e-003	0.0000	42.3529	42.3529	8.1000e-004	7.8000e-004	42.6046
Landscaping	0.4996	0.1903	16.5352	8.8000e-004		0.0917	0.0917		0.0917	0.0917		29.8191	29.8191	0.0287		30.5375
Total	**6.1959**	**0.2235**	**16.5493**	**1.0900e-003**		**0.0943**	**0.0943**		**0.0943**	**0.0943**	**0.0000**	**72.1721**	**72.1721**	**0.0295**	**7.8000e-004**	**73.1421**

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	0.8584					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.8340					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	3.8800e-003	0.0332	0.0141	2.1000e-004		2.6800e-003	2.6800e-003		2.6800e-003	2.6800e-003	0.0000	42.3529	42.3529	8.1000e-004	7.8000e-004	42.6046
Landscaping	0.4996	0.1903	16.5352	8.8000e-004		0.0917	0.0917		0.0917	0.0917		29.8191	29.8191	0.0287		30.5375
Total	**6.1959**	**0.2235**	**16.5493**	**1.0900e-003**		**0.0943**	**0.0943**		**0.0943**	**0.0943**	**0.0000**	**72.1721**	**72.1721**	**0.0295**	**7.8000e-004**	**73.1421**

Del Amo Circle Apt - 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

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Del Amo Circle Apt - 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

Del Amo Circle Apt

Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Mid Rise	200.00	Dwelling Unit	1.08	240,556.00	572
Enclosed Parking with Elevator	440.00	Space	0.55	169,946.00	0
Other Asphalt Surfaces	19.40	1000sqft	0.45	19,400.00	0
Other Non-Asphalt Surfaces	37.11	1000sqft	0.85	11,011.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	8			**Operational Year**	2025
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	449.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Based on the CO2e intensity of 452 lbs/MWh per the Southern California Edison 2021 Sustainability Report.

Land Use - Based on information provided by the applicant.

Construction Phase - Based on information provided/verified by the Applicant and CalEEMod defaults.

Grading -

Demolition -

Trips and VMT - Assumes water trucks for demolition, site preparation, and grading. See assumptions in the AQ/GHG appendix.

Architectural Coating - Assumes architectural coating and striping of parking structure and striping of the proposed accessway. See assumptions in the AQ/GHG appendix.

Vehicle Trips - Based on information provided by LLG.

Woodstoves - Accounts for the two firepits for resident use. Assumes no wood stoves per South Coast AQMD Rule 445 and no fireplaces for dwelling units per the site

Area Coating - Assumes architectural coating and striping for the parking structure and striping for the accessway.

Water And Wastewater - See assumptions in the AQ/GHG appendix.

Del Amo Circle Apt - 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

Construction Off-road Equipment Mitigation - Based on South Coast AQMD Rules 403 and 1186.

Water Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	0.00	84,973.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	0.00	254,919.00
tblArchitecturalCoating	ConstArea_Parking	12,021.00	11,361.00
tblAreaCoating	Area_Nonresidential_Exterior	0	84973
tblAreaCoating	Area_Nonresidential_Interior	0	254919
tblAreaCoating	Area_Parking	12021	11361
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	10.00	23.00
tblConstructionPhase	NumDays	220.00	515.00
tblConstructionPhase	NumDays	20.00	18.00
tblConstructionPhase	NumDays	6.00	59.00
tblConstructionPhase	NumDays	10.00	21.00
tblConstructionPhase	NumDays	3.00	8.00
tblConstructionPhase	PhaseEndDate	8/22/2024	11/28/2025
tblConstructionPhase	PhaseEndDate	7/25/2024	11/28/2025
tblConstructionPhase	PhaseEndDate	9/8/2023	9/6/2023
tblConstructionPhase	PhaseEndDate	9/21/2023	12/8/2023
tblConstructionPhase	PhaseEndDate	8/8/2024	12/15/2025
tblConstructionPhase	PhaseEndDate	9/13/2023	9/18/2023
tblConstructionPhase	PhaseStartDate	8/9/2024	10/29/2025
tblConstructionPhase	PhaseStartDate	9/22/2023	12/9/2023
tblConstructionPhase	PhaseStartDate	9/14/2023	9/19/2023
tblConstructionPhase	PhaseStartDate	7/26/2024	11/15/2025
tblConstructionPhase	PhaseStartDate	9/9/2023	9/7/2023
tblFireplaces	NumberGas	170.00	2.00
tblFireplaces	NumberNoFireplace	20.00	198.00

Del Amo Circle Apt - 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

tblFireplaces	NumberWood	10.00	0.00
tblGrading	MaterialExported	0.00	10,700.00
tblGrading	MaterialExported	0.00	500.00
tblLandUse	LandUseSquareFeet	200,000.00	240,556.00
tblLandUse	LandUseSquareFeet	176,000.00	169,946.00
tblLandUse	LandUseSquareFeet	37,111.00	11,011.00
tblLandUse	LotAcreage	5.26	1.08
tblLandUse	LotAcreage	3.96	0.55
tblProjectCharacteristics	CO2IntensityFactor	390.98	449.98
tblTripsAndVMT	HaulingTripNumber	63.00	62.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblVehicleTrips	ST_TR	4.91	4.57
tblVehicleTrips	SU_TR	4.09	3.77
tblVehicleTrips	WD_TR	5.44	4.54
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	IndoorWaterUseRate	13,030,805.12	15,389,130.00
tblWater	OutdoorWaterUseRate	8,215,072.80	317,217.00
tblWater	SepticTankPercent	10.33	0.00
tblWoodstoves	NumberCatalytic	10.00	0.00
tblWoodstoves	NumberNoncatalytic	10.00	0.00

Del Amo Circle Apt - 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

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					
2023	0.0802	0.8700	0.6388	1.9600e-003	0.2940	0.0317	0.3257	0.1188	0.0295	0.1483	0.0000	179.6677	179.6677	0.0316	0.0105	183.5826
2024	0.3054	2.0327	2.8979	7.3400e-003	0.3719	0.0738	0.4457	0.0998	0.0706	0.1704	0.0000	651.9521	651.9521	0.0613	0.0246	660.8009
2025	1.8386	1.8364	2.7236	6.8400e-003	0.3453	0.0632	0.4085	0.0927	0.0603	0.1529	0.0000	607.2176	607.2176	0.0599	0.0218	615.2027
Maximum	**1.8386**	**2.0327**	**2.8979**	**7.3400e-003**	**0.3719**	**0.0738**	**0.4457**	**0.1188**	**0.0706**	**0.1704**	**0.0000**	**651.9521**	**651.9521**	**0.0613**	**0.0246**	**660.8009**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.0802	0.8700	0.6388	1.9600e-003	0.1473	0.0317	0.1790	0.0568	0.0295	0.0862	0.0000	179.6676	179.6676	0.0316	0.0105	183.5824
2024	0.3054	2.0327	2.8979	7.3400e-003	0.3435	0.0738	0.4173	0.0928	0.0706	0.1634	0.0000	651.9518	651.9518	0.0613	0.0246	660.8005
2025	1.8386	1.8364	2.7236	6.8400e-003	0.3190	0.0632	0.3821	0.0862	0.0603	0.1465	0.0000	607.2173	607.2173	0.0599	0.0218	615.2024
Maximum	**1.8386**	**2.0327**	**2.8979**	**7.3400e-003**	**0.3435**	**0.0738**	**0.4173**	**0.0928**	**0.0706**	**0.1634**	**0.0000**	**651.9518**	**651.9518**	**0.0613**	**0.0246**	**660.8005**

Del Amo Circle Apt - 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	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	19.92	0.00	17.07	24.26	0.00	16.01	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	8-14-2023	11-13-2023	0.6182	0.6182
2	11-14-2023	2-13-2024	0.6097	0.6097
3	2-14-2024	5-13-2024	0.5719	0.5719
4	5-14-2024	8-13-2024	0.5813	0.5813
5	8-14-2024	11-13-2024	0.5844	0.5844
6	11-14-2024	2-13-2025	0.5718	0.5718
7	2-14-2025	5-13-2025	0.5334	0.5334
8	5-14-2025	8-13-2025	0.5481	0.5481
9	8-14-2025	9-30-2025	0.2860	0.2860
		Highest	0.6182	0.6182

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.1014	0.0242	2.0671	1.1000e-004		0.0115	0.0115		0.0115	0.0115	0.0000	3.8617	3.8617	3.2700e-003	1.0000e-005	3.9460
Energy	0.0120	0.1028	0.0437	6.6000e-004		8.3100e-003	8.3100e-003		8.3100e-003	8.3100e-003	0.0000	464.1986	464.1986	0.0276	5.2500e-003	466.4531
Mobile	0.4566	0.5144	4.7124	0.0104	1.1387	7.5900e-003	1.1463	0.3038	7.0500e-003	0.3109	0.0000	963.5437	963.5437	0.0661	0.0417	977.6132
Waste						0.0000	0.0000		0.0000	0.0000	18.6752	0.0000	18.6752	1.1037	0.0000	46.2669
Water						0.0000	0.0000		0.0000	0.0000	5.4447	41.6188	47.0635	0.0218	0.0122	51.2470
Total	**1.5700**	**0.6414**	**6.8232**	**0.0112**	**1.1387**	**0.0274**	**1.1661**	**0.3038**	**0.0269**	**0.3307**	**24.1199**	**1,473.2228**	**1,497.3427**	**1.2225**	**0.0591**	**1,545.5262**

Del Amo Circle Apt - 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 Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.1014	0.0242	2.0671	1.1000e-004		0.0115	0.0115		0.0115	0.0115	0.0000	3.8617	3.8617	3.2700e-003	1.0000e-005	3.9460
Energy	0.0120	0.1028	0.0437	6.6000e-004		8.3100e-003	8.3100e-003		8.3100e-003	8.3100e-003	0.0000	464.1986	464.1986	0.0276	5.2500e-003	466.4531
Mobile	0.4566	0.5144	4.7124	0.0104	1.1387	7.5900e-003	1.1463	0.3038	7.0500e-003	0.3109	0.0000	963.5437	963.5437	0.0661	0.0417	977.6132
Waste						0.0000	0.0000		0.0000	0.0000	18.6752	0.0000	18.6752	1.1037	0.0000	46.2669
Water						0.0000	0.0000		0.0000	0.0000	5.4447	41.6188	47.0635	0.0218	0.0122	51.2470
Total	**1.5700**	**0.6414**	**6.8232**	**0.0112**	**1.1387**	**0.0274**	**1.1661**	**0.3038**	**0.0269**	**0.3307**	**24.1199**	**1,473.2228**	**1,497.3427**	**1.2225**	**0.0591**	**1,545.5262**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	8/14/2023	9/6/2023	5	18	
2	Site Preparation	Site Preparation	9/7/2023	9/18/2023	5	8	
3	Grading	Grading	9/19/2023	12/8/2023	5	59	
4	Building Construction	Building Construction	12/9/2023	11/28/2025	5	515	
5	Paving	Paving	11/15/2025	12/15/2025	5	21	
6	Architectural Coating	Architectural Coating	10/29/2025	11/28/2025	5	23	

Del Amo Circle Apt - 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

Acres of Grading (Site Preparation Phase): 12

Acres of Grading (Grading Phase): 59

Acres of Paving: 1.85

Residential Indoor: 487,126; Residential Outdoor: 162,375; Non-Residential Indoor: 254,919; Non-Residential Outdoor: 84,973; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Grading	Graders	1	8.00	187	0.41
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Site Preparation	Scrapers	1	8.00	367	0.48
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45

Del Amo Circle Apt - 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

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	5	13.00	4.00	321.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	10.00	62.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	10.00	1,338.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	228.00	54.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	46.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Demolition - 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					0.0348	0.0000	0.0348	5.2700e-003	0.0000	5.2700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0133	0.1289	0.1211	2.2000e-004		6.0900e-003	6.0900e-003		5.6900e-003	5.6900e-003	0.0000	18.9779	18.9779	4.8100e-003	0.0000	19.0982
Total	**0.0133**	**0.1289**	**0.1211**	**2.2000e-004**	**0.0348**	**6.0900e-003**	**0.0409**	**5.2700e-003**	**5.6900e-003**	**0.0110**	**0.0000**	**18.9779**	**18.9779**	**4.8100e-003**	**0.0000**	**19.0982**

Del Amo Circle Apt - 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 Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.4000e-004	0.0221	5.6200e-003	9.0000e-005	2.7600e-003	1.3000e-004	2.8900e-003	7.6000e-004	1.3000e-004	8.9000e-004	0.0000	9.3615	9.3615	5.2000e-004	1.4900e-003	9.8174
Vendor	4.0000e-005	1.4500e-003	5.4000e-004	1.0000e-005	2.3000e-004	1.0000e-005	2.3000e-004	7.0000e-005	1.0000e-005	7.0000e-005	0.0000	0.6546	0.6546	2.0000e-005	9.0000e-005	0.6832
Worker	3.7000e-004	2.9000e-004	3.9900e-003	1.0000e-005	1.2800e-003	1.0000e-005	1.2900e-003	3.4000e-004	1.0000e-005	3.5000e-004	0.0000	1.0205	1.0205	3.0000e-005	3.0000e-005	1.0291
Total	**7.5000e-004**	**0.0238**	**0.0102**	**1.1000e-004**	**4.2700e-003**	**1.5000e-004**	**4.4100e-003**	**1.1700e-003**	**1.5000e-004**	**1.3100e-003**	**0.0000**	**11.0366**	**11.0366**	**5.7000e-004**	**1.6100e-003**	**11.5297**

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					0.0149	0.0000	0.0149	2.2500e-003	0.0000	2.2500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0133	0.1289	0.1211	2.2000e-004		6.0900e-003	6.0900e-003		5.6900e-003	5.6900e-003	0.0000	18.9779	18.9779	4.8100e-003	0.0000	19.0982
Total	**0.0133**	**0.1289**	**0.1211**	**2.2000e-004**	**0.0149**	**6.0900e-003**	**0.0210**	**2.2500e-003**	**5.6900e-003**	**7.9400e-003**	**0.0000**	**18.9779**	**18.9779**	**4.8100e-003**	**0.0000**	**19.0982**

Del Amo Circle Apt - 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 Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.4000e-004	0.0221	5.6200e-003	9.0000e-005	2.5700e-003	1.3000e-004	2.7100e-003	7.1000e-004	1.3000e-004	8.4000e-004	0.0000	9.3615	9.3615	5.2000e-004	1.4900e-003	9.8174
Vendor	4.0000e-005	1.4500e-003	5.4000e-004	1.0000e-005	2.1000e-004	1.0000e-005	2.2000e-004	6.0000e-005	1.0000e-005	7.0000e-005	0.0000	0.6546	0.6546	2.0000e-005	9.0000e-005	0.6832
Worker	3.7000e-004	2.9000e-004	3.9900e-003	1.0000e-005	1.1800e-003	1.0000e-005	1.1900e-003	3.2000e-004	1.0000e-005	3.2000e-004	0.0000	1.0205	1.0205	3.0000e-005	3.0000e-005	1.0291
Total	**7.5000e-004**	**0.0238**	**0.0102**	**1.1000e-004**	**3.9600e-003**	**1.5000e-004**	**4.1200e-003**	**1.0900e-003**	**1.5000e-004**	**1.2300e-003**	**0.0000**	**11.0366**	**11.0366**	**5.7000e-004**	**1.6100e-003**	**11.5297**

3.3 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					6.3900e-003	0.0000	6.3900e-003	6.9000e-004	0.0000	6.9000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.2100e-003	0.0571	0.0391	1.0000e-004		2.1700e-003	2.1700e-003		1.9900e-003	1.9900e-003	0.0000	8.6178	8.6178	2.7900e-003	0.0000	8.6874
Total	**5.2100e-003**	**0.0571**	**0.0391**	**1.0000e-004**	**6.3900e-003**	**2.1700e-003**	**8.5600e-003**	**6.9000e-004**	**1.9900e-003**	**2.6800e-003**	**0.0000**	**8.6178**	**8.6178**	**2.7900e-003**	**0.0000**	**8.6874**

Del Amo Circle Apt - 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 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	7.0000e-005	4.2600e-003	1.0900e-003	2.0000e-005	5.3000e-004	3.0000e-005	5.6000e-004	1.5000e-004	2.0000e-005	1.7000e-004	0.0000	1.8081	1.8081	1.0000e-004	2.9000e-004	1.8962
Vendor	5.0000e-005	1.6100e-003	6.0000e-004	1.0000e-005	2.5000e-004	1.0000e-005	2.6000e-004	7.0000e-005	1.0000e-005	8.0000e-005	0.0000	0.7273	0.7273	2.0000e-005	1.0000e-004	0.7591
Worker	1.0000e-004	8.0000e-005	1.0900e-003	0.0000	3.5000e-004	0.0000	3.5000e-004	9.0000e-005	0.0000	1.0000e-004	0.0000	0.2791	0.2791	1.0000e-005	1.0000e-005	0.2815
Total	**2.2000e-004**	**5.9500e-003**	**2.7800e-003**	**3.0000e-005**	**1.1300e-003**	**4.0000e-005**	**1.1700e-003**	**3.1000e-004**	**3.0000e-005**	**3.5000e-004**	**0.0000**	**2.8146**	**2.8146**	**1.3000e-004**	**4.0000e-004**	**2.9368**

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					2.7300e-003	0.0000	2.7300e-003	3.0000e-004	0.0000	3.0000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.2100e-003	0.0571	0.0391	1.0000e-004		2.1700e-003	2.1700e-003		1.9900e-003	1.9900e-003	0.0000	8.6178	8.6178	2.7900e-003	0.0000	8.6874
Total	**5.2100e-003**	**0.0571**	**0.0391**	**1.0000e-004**	**2.7300e-003**	**2.1700e-003**	**4.9000e-003**	**3.0000e-004**	**1.9900e-003**	**2.2900e-003**	**0.0000**	**8.6178**	**8.6178**	**2.7900e-003**	**0.0000**	**8.6874**

Del Amo Circle Apt - 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 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	7.0000e-005	4.2600e-003	1.0900e-003	2.0000e-005	5.0000e-004	3.0000e-005	5.2000e-004	1.4000e-004	2.0000e-005	1.6000e-004	0.0000	1.8081	1.8081	1.0000e-004	2.9000e-004	1.8962
Vendor	5.0000e-005	1.6100e-003	6.0000e-004	1.0000e-005	2.4000e-004	1.0000e-005	2.4000e-004	7.0000e-005	1.0000e-005	8.0000e-005	0.0000	0.7273	0.7273	2.0000e-005	1.0000e-004	0.7591
Worker	1.0000e-004	8.0000e-005	1.0900e-003	0.0000	3.2000e-004	0.0000	3.3000e-004	9.0000e-005	0.0000	9.0000e-005	0.0000	0.2791	0.2791	1.0000e-005	1.0000e-005	0.2815
Total	**2.2000e-004**	**5.9500e-003**	**2.7800e-003**	**3.0000e-005**	**1.0600e-003**	**4.0000e-005**	**1.0900e-003**	**3.0000e-004**	**3.0000e-005**	**3.3000e-004**	**0.0000**	**2.8146**	**2.8146**	**1.3000e-004**	**4.0000e-004**	**2.9368**

3.4 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					0.2095	0.0000	0.2095	0.1011	0.0000	0.1011	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0393	0.4268	0.2568	6.1000e-004		0.0178	0.0178		0.0164	0.0164	0.0000	53.4065	53.4065	0.0173	0.0000	53.8384
Total	**0.0393**	**0.4268**	**0.2568**	**6.1000e-004**	**0.2095**	**0.0178**	**0.2274**	**0.1011**	**0.0164**	**0.1175**	**0.0000**	**53.4065**	**53.4065**	**0.0173**	**0.0000**	**53.8384**

Del Amo Circle Apt - 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 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	1.4100e-003	0.0920	0.0234	3.9000e-004	0.0115	5.5000e-004	0.0121	3.1600e-003	5.3000e-004	3.6900e-003	0.0000	39.0207	39.0207	2.1500e-003	6.2000e-003	40.9210
Vendor	3.3000e-004	0.0119	4.4500e-003	5.0000e-005	1.8600e-003	6.0000e-005	1.9200e-003	5.4000e-004	5.0000e-005	5.9000e-004	0.0000	5.3638	5.3638	1.8000e-004	7.7000e-004	5.5983
Worker	9.4000e-004	7.4000e-004	0.0101	3.0000e-005	3.2300e-003	2.0000e-005	3.2500e-003	8.6000e-004	2.0000e-005	8.8000e-004	0.0000	2.5731	2.5731	7.0000e-005	7.0000e-005	2.5948
Total	**2.6800e-003**	**0.1046**	**0.0379**	**4.7000e-004**	**0.0166**	**6.3000e-004**	**0.0172**	**4.5600e-003**	**6.0000e-004**	**5.1600e-003**	**0.0000**	**46.9576**	**46.9576**	**2.4000e-003**	**7.0400e-003**	**49.1141**

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					0.0896	0.0000	0.0896	0.0432	0.0000	0.0432	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0393	0.4268	0.2568	6.1000e-004		0.0178	0.0178		0.0164	0.0164	0.0000	53.4065	53.4065	0.0173	0.0000	53.8383
Total	**0.0393**	**0.4268**	**0.2568**	**6.1000e-004**	**0.0896**	**0.0178**	**0.1074**	**0.0432**	**0.0164**	**0.0596**	**0.0000**	**53.4065**	**53.4065**	**0.0173**	**0.0000**	**53.8383**

Del Amo Circle Apt - 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 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	1.4100e-003	0.0920	0.0234	3.9000e-004	0.0107	5.5000e-004	0.0113	2.9700e-003	5.3000e-004	3.5000e-003	0.0000	39.0207	39.0207	2.1500e-003	6.2000e-003	40.9210
Vendor	3.3000e-004	0.0119	4.4500e-003	5.0000e-005	1.7400e-003	6.0000e-005	1.8000e-003	5.1000e-004	5.0000e-005	5.6000e-004	0.0000	5.3638	5.3638	1.8000e-004	7.7000e-004	5.5983
Worker	9.4000e-004	7.4000e-004	0.0101	3.0000e-005	2.9800e-003	2.0000e-005	3.0000e-003	8.0000e-004	2.0000e-005	8.1000e-004	0.0000	2.5731	2.5731	7.0000e-005	7.0000e-005	2.5948
Total	**2.6800e-003**	**0.1046**	**0.0379**	**4.7000e-004**	**0.0155**	**6.3000e-004**	**0.0161**	**4.2800e-003**	**6.0000e-004**	**4.8700e-003**	**0.0000**	**46.9576**	**46.9576**	**2.4000e-003**	**7.0400e-003**	**49.1141**

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	tons/yr										MT/yr					
Off-Road	0.0129	0.1022	0.1066	1.9000e-004		4.6000e-003	4.6000e-003		4.4100e-003	4.4100e-003	0.0000	15.5777	15.5777	2.9500e-003	0.0000	15.6513
Total	**0.0129**	**0.1022**	**0.1066**	**1.9000e-004**		**4.6000e-003**	**4.6000e-003**		**4.4100e-003**	**4.4100e-003**	**0.0000**	**15.5777**	**15.5777**	**2.9500e-003**	**0.0000**	**15.6513**

Del Amo Circle Apt - 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 Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.6000e-004	0.0163	6.1100e-003	8.0000e-005	2.5500e-003	8.0000e-005	2.6300e-003	7.4000e-004	7.0000e-005	8.1000e-004	0.0000	7.3638	7.3638	2.5000e-004	1.0600e-003	7.6858
Worker	5.4300e-003	4.3100e-003	0.0583	1.6000e-004	0.0187	1.1000e-004	0.0189	4.9800e-003	1.1000e-004	5.0800e-003	0.0000	14.9154	14.9154	4.0000e-004	3.9000e-004	15.0410
Total	**5.8900e-003**	**0.0206**	**0.0644**	**2.4000e-004**	**0.0213**	**1.9000e-004**	**0.0215**	**5.7200e-003**	**1.8000e-004**	**5.8900e-003**	**0.0000**	**22.2792**	**22.2792**	**6.5000e-004**	**1.4500e-003**	**22.7268**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0129	0.1022	0.1066	1.9000e-004		4.6000e-003	4.6000e-003		4.4100e-003	4.4100e-003	0.0000	15.5776	15.5776	2.9500e-003	0.0000	15.6513
Total	**0.0129**	**0.1022**	**0.1066**	**1.9000e-004**		**4.6000e-003**	**4.6000e-003**		**4.4100e-003**	**4.4100e-003**	**0.0000**	**15.5776**	**15.5776**	**2.9500e-003**	**0.0000**	**15.6513**

Del Amo Circle Apt - 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 Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.6000e-004	0.0163	6.1100e-003	8.0000e-005	2.3900e-003	8.0000e-005	2.4700e-003	7.0000e-004	7.0000e-005	7.7000e-004	0.0000	7.3638	7.3638	2.5000e-004	1.0600e-003	7.6858
Worker	5.4300e-003	4.3100e-003	0.0583	1.6000e-004	0.0173	1.1000e-004	0.0174	4.6200e-003	1.1000e-004	4.7200e-003	0.0000	14.9154	14.9154	4.0000e-004	3.9000e-004	15.0410
Total	**5.8900e-003**	**0.0206**	**0.0644**	**2.4000e-004**	**0.0197**	**1.9000e-004**	**0.0199**	**5.3200e-003**	**1.8000e-004**	**5.4900e-003**	**0.0000**	**22.2792**	**22.2792**	**6.5000e-004**	**1.4500e-003**	**22.7268**

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	tons/yr										MT/yr					
Off-Road	0.2092	1.6799	1.8471	3.2800e-003		0.0705	0.0705		0.0675	0.0675	0.0000	272.1052	272.1052	0.0507	0.0000	273.3722
Total	**0.2092**	**1.6799**	**1.8471**	**3.2800e-003**		**0.0705**	**0.0705**		**0.0675**	**0.0675**	**0.0000**	**272.1052**	**272.1052**	**0.0507**	**0.0000**	**273.3722**

Del Amo Circle Apt - 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 Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.7400e-003	0.2857	0.1045	1.3000e-003	0.0446	1.3800e-003	0.0460	0.0129	1.3200e-003	0.0142	0.0000	126.6913	126.6913	4.3200e-003	0.0183	132.2378
Worker	0.0884	0.0671	0.9463	2.7600e-003	0.3273	1.9200e-003	0.3292	0.0869	1.7700e-003	0.0887	0.0000	253.1556	253.1556	6.2700e-003	6.3000e-003	255.1908
Total	**0.0962**	**0.3528**	**1.0507**	**4.0600e-003**	**0.3719**	**3.3000e-003**	**0.3752**	**0.0998**	**3.0900e-003**	**0.1029**	**0.0000**	**379.8469**	**379.8469**	**0.0106**	**0.0246**	**387.4286**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2092	1.6799	1.8471	3.2800e-003		0.0705	0.0705		0.0675	0.0675	0.0000	272.1049	272.1049	0.0507	0.0000	273.3719
Total	**0.2092**	**1.6799**	**1.8471**	**3.2800e-003**		**0.0705**	**0.0705**		**0.0675**	**0.0675**	**0.0000**	**272.1049**	**272.1049**	**0.0507**	**0.0000**	**273.3719**

Del Amo Circle Apt - 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 Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.7400e-003	0.2857	0.1045	1.3000e-003	0.0417	1.3800e-003	0.0431	0.0122	1.3200e-003	0.0135	0.0000	126.6913	126.6913	4.3200e-003	0.0183	132.2378
Worker	0.0884	0.0671	0.9463	2.7600e-003	0.3018	1.9200e-003	0.3037	0.0807	1.7700e-003	0.0824	0.0000	253.1556	253.1556	6.2700e-003	6.3000e-003	255.1908
Total	**0.0962**	**0.3528**	**1.0507**	**4.0600e-003**	**0.3435**	**3.3000e-003**	**0.3468**	**0.0928**	**3.0900e-003**	**0.0959**	**0.0000**	**379.8469**	**379.8469**	**0.0106**	**0.0246**	**387.4286**

3.5 Building Construction - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1773	1.4308	1.6669	2.9800e-003		0.0559	0.0559		0.0535	0.0535	0.0000	247.2050	247.2050	0.0453	0.0000	248.3384
Total	**0.1773**	**1.4308**	**1.6669**	**2.9800e-003**		**0.0559**	**0.0559**		**0.0535**	**0.0535**	**0.0000**	**247.2050**	**247.2050**	**0.0453**	**0.0000**	**248.3384**

Del Amo Circle Apt - 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 Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.8300e-003	0.2583	0.0932	1.1600e-003	0.0405	1.2600e-003	0.0418	0.0117	1.2000e-003	0.0129	0.0000	113.0155	113.0155	3.9500e-003	0.0163	117.9688
Worker	0.0752	0.0547	0.7999	2.4200e-003	0.2973	1.6600e-003	0.2990	0.0790	1.5300e-003	0.0805	0.0000	222.1514	222.1514	5.1400e-003	5.3500e-003	223.8731
Total	**0.0820**	**0.3130**	**0.8931**	**3.5800e-003**	**0.3378**	**2.9200e-003**	**0.3407**	**0.0907**	**2.7300e-003**	**0.0934**	**0.0000**	**335.1668**	**335.1668**	**9.0900e-003**	**0.0216**	**341.8419**

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	0.1773	1.4308	1.6669	2.9800e-003		0.0559	0.0559		0.0535	0.0535	0.0000	247.2047	247.2047	0.0453	0.0000	248.3381
Total	**0.1773**	**1.4308**	**1.6669**	**2.9800e-003**		**0.0559**	**0.0559**		**0.0535**	**0.0535**	**0.0000**	**247.2047**	**247.2047**	**0.0453**	**0.0000**	**248.3381**

Del Amo Circle Apt - 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 Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.8300e-003	0.2583	0.0932	1.1600e-003	0.0379	1.2600e-003	0.0392	0.0111	1.2000e-003	0.0123	0.0000	113.0155	113.0155	3.9500e-003	0.0163	117.9688
Worker	0.0752	0.0547	0.7999	2.4200e-003	0.2741	1.6600e-003	0.2758	0.0733	1.5300e-003	0.0748	0.0000	222.1514	222.1514	5.1400e-003	5.3500e-003	223.8731
Total	**0.0820**	**0.3130**	**0.8931**	**3.5800e-003**	**0.3120**	**2.9200e-003**	**0.3150**	**0.0843**	**2.7300e-003**	**0.0871**	**0.0000**	**335.1668**	**335.1668**	**9.0900e-003**	**0.0216**	**341.8419**

3.6 Paving - 2025

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	8.2500e-003	0.0781	0.1226	1.9000e-004		3.6800e-003	3.6800e-003		3.4000e-003	3.4000e-003	0.0000	16.2886	16.2886	5.1600e-003	0.0000	16.4176
Paving	5.9000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**8.8400e-003**	**0.0781**	**0.1226**	**1.9000e-004**		**3.6800e-003**	**3.6800e-003**		**3.4000e-003**	**3.4000e-003**	**0.0000**	**16.2886**	**16.2886**	**5.1600e-003**	**0.0000**	**16.4176**

Del Amo Circle Apt - 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 Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.4000e-004	3.2000e-004	4.6400e-003	1.0000e-005	1.7300e-003	1.0000e-005	1.7400e-003	4.6000e-004	1.0000e-005	4.7000e-004	0.0000	1.2896	1.2896	3.0000e-005	3.0000e-005	1.2996
Total	**4.4000e-004**	**3.2000e-004**	**4.6400e-003**	**1.0000e-005**	**1.7300e-003**	**1.0000e-005**	**1.7400e-003**	**4.6000e-004**	**1.0000e-005**	**4.7000e-004**	**0.0000**	**1.2896**	**1.2896**	**3.0000e-005**	**3.0000e-005**	**1.2996**

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	8.2500e-003	0.0781	0.1226	1.9000e-004		3.6800e-003	3.6800e-003		3.4000e-003	3.4000e-003	0.0000	16.2886	16.2886	5.1600e-003	0.0000	16.4176
Paving	5.9000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**8.8400e-003**	**0.0781**	**0.1226**	**1.9000e-004**		**3.6800e-003**	**3.6800e-003**		**3.4000e-003**	**3.4000e-003**	**0.0000**	**16.2886**	**16.2886**	**5.1600e-003**	**0.0000**	**16.4176**

Del Amo Circle Apt - 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 Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.4000e-004	3.2000e-004	4.6400e-003	1.0000e-005	1.5900e-003	1.0000e-005	1.6000e-003	4.3000e-004	1.0000e-005	4.3000e-004	0.0000	1.2896	1.2896	3.0000e-005	3.0000e-005	1.2996
Total	**4.4000e-004**	**3.2000e-004**	**4.6400e-003**	**1.0000e-005**	**1.5900e-003**	**1.0000e-005**	**1.6000e-003**	**4.3000e-004**	**1.0000e-005**	**4.3000e-004**	**0.0000**	**1.2896**	**1.2896**	**3.0000e-005**	**3.0000e-005**	**1.2996**

3.7 Architectural Coating - 2025

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	1.5666					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.9600e-003	0.0132	0.0208	3.0000e-005		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004	0.0000	2.9362	2.9362	1.6000e-004	0.0000	2.9403
Total	**1.5686**	**0.0132**	**0.0208**	**3.0000e-005**		**5.9000e-004**	**5.9000e-004**		**5.9000e-004**	**5.9000e-004**	**0.0000**	**2.9362**	**2.9362**	**1.6000e-004**	**0.0000**	**2.9403**

Del Amo Circle Apt - 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 Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.4700e-003	1.0700e-003	0.0156	5.0000e-005	5.8000e-003	3.0000e-005	5.8300e-003	1.5400e-003	3.0000e-005	1.5700e-003	0.0000	4.3314	4.3314	1.0000e-004	1.0000e-004	4.3649
Total	**1.4700e-003**	**1.0700e-003**	**0.0156**	**5.0000e-005**	**5.8000e-003**	**3.0000e-005**	**5.8300e-003**	**1.5400e-003**	**3.0000e-005**	**1.5700e-003**	**0.0000**	**4.3314**	**4.3314**	**1.0000e-004**	**1.0000e-004**	**4.3649**

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	1.5666					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.9600e-003	0.0132	0.0208	3.0000e-005		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004	0.0000	2.9362	2.9362	1.6000e-004	0.0000	2.9402
Total	**1.5686**	**0.0132**	**0.0208**	**3.0000e-005**		**5.9000e-004**	**5.9000e-004**		**5.9000e-004**	**5.9000e-004**	**0.0000**	**2.9362**	**2.9362**	**1.6000e-004**	**0.0000**	**2.9402**

Del Amo Circle Apt - 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 Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.4700e-003	1.0700e-003	0.0156	5.0000e-005	5.3400e-003	3.0000e-005	5.3800e-003	1.4300e-003	3.0000e-005	1.4600e-003	0.0000	4.3314	4.3314	1.0000e-004	1.0000e-004	4.3649
Total	**1.4700e-003**	**1.0700e-003**	**0.0156**	**5.0000e-005**	**5.3400e-003**	**3.0000e-005**	**5.3800e-003**	**1.4300e-003**	**3.0000e-005**	**1.4600e-003**	**0.0000**	**4.3314**	**4.3314**	**1.0000e-004**	**1.0000e-004**	**4.3649**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.4566	0.5144	4.7124	0.0104	1.1387	7.5900e-003	1.1463	0.3038	7.0500e-003	0.3109	0.0000	963.5437	963.5437	0.0661	0.0417	977.6132
Unmitigated	0.4566	0.5144	4.7124	0.0104	1.1387	7.5900e-003	1.1463	0.3038	7.0500e-003	0.3109	0.0000	963.5437	963.5437	0.0661	0.0417	977.6132

Del Amo Circle Apt - 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

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	908.00	914.00	754.00	3,030,526	3,030,526
Enclosed Parking with Elevator	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	908.00	914.00	754.00	3,030,526	3,030,526

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	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
Enclosed Parking with Elevator	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
Other Asphalt Surfaces	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
Other Non-Asphalt Surfaces	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						0.0000	0.0000		0.0000	0.0000	0.0000	345.2013	345.2013	0.0253	3.0700e-003	346.7487
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	345.2013	345.2013	0.0253	3.0700e-003	346.7487
NaturalGas Mitigated	0.0120	0.1028	0.0437	6.6000e-004		8.3100e-003	8.3100e-003		8.3100e-003	8.3100e-003	0.0000	118.9972	118.9972	2.2800e-003	2.1800e-003	119.7044
NaturalGas Unmitigated	0.0120	0.1028	0.0437	6.6000e-004		8.3100e-003	8.3100e-003		8.3100e-003	8.3100e-003	0.0000	118.9972	118.9972	2.2800e-003	2.1800e-003	119.7044

Del Amo Circle Apt - 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

5.2 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					
Apartments Mid Rise	2.22992e+006	0.0120	0.1028	0.0437	6.6000e-004		8.3100e-003	8.3100e-003		8.3100e-003	8.3100e-003	0.0000	118.9972	118.9972	2.2800e-003	2.1800e-003	119.7044
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0120**	**0.1028**	**0.0437**	**6.6000e-004**		**8.3100e-003**	**8.3100e-003**		**8.3100e-003**	**8.3100e-003**	**0.0000**	**118.9972**	**118.9972**	**2.2800e-003**	**2.1800e-003**	**119.7044**

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					
Apartments Mid Rise	2.22992e+006	0.0120	0.1028	0.0437	6.6000e-004		8.3100e-003	8.3100e-003		8.3100e-003	8.3100e-003	0.0000	118.9972	118.9972	2.2800e-003	2.1800e-003	119.7044
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0120**	**0.1028**	**0.0437**	**6.6000e-004**		**8.3100e-003**	**8.3100e-003**		**8.3100e-003**	**8.3100e-003**	**0.0000**	**118.9972**	**118.9972**	**2.2800e-003**	**2.1800e-003**	**119.7044**

Del Amo Circle Apt - 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

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	766766	156.5027	0.0115	1.3900e-003	157.2042
Enclosed Parking with Elevator	924506	188.6987	0.0138	1.6800e-003	189.5445
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**345.2013**	**0.0253**	**3.0700e-003**	**346.7487**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	766766	156.5027	0.0115	1.3900e-003	157.2042
Enclosed Parking with Elevator	924506	188.6987	0.0138	1.6800e-003	189.5445
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**345.2013**	**0.0253**	**3.0700e-003**	**346.7487**

Del Amo Circle Apt - 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

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	1.1014	0.0242	2.0671	1.1000e-004		0.0115	0.0115		0.0115	0.0115	0.0000	3.8617	3.8617	3.2700e-003	1.0000e-005	3.9460
Unmitigated	1.1014	0.0242	2.0671	1.1000e-004		0.0115	0.0115		0.0115	0.0115	0.0000	3.8617	3.8617	3.2700e-003	1.0000e-005	3.9460

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	0.1567					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.8822					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	5.0000e-005	4.1000e-004	1.8000e-004	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.4803	0.4803	1.0000e-005	1.0000e-005	0.4831
Landscaping	0.0625	0.0238	2.0669	1.1000e-004		0.0115	0.0115		0.0115	0.0115	0.0000	3.3814	3.3814	3.2600e-003	0.0000	3.4629
Total	**1.1014**	**0.0242**	**2.0671**	**1.1000e-004**		**0.0115**	**0.0115**		**0.0115**	**0.0115**	**0.0000**	**3.8617**	**3.8617**	**3.2700e-003**	**1.0000e-005**	**3.9460**

Del Amo Circle Apt - 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	0.1567					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.8822					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	5.0000e-005	4.1000e-004	1.8000e-004	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.4803	0.4803	1.0000e-005	1.0000e-005	0.4831
Landscaping	0.0625	0.0238	2.0669	1.1000e-004		0.0115	0.0115		0.0115	0.0115	0.0000	3.3814	3.3814	3.2600e-003	0.0000	3.4629
Total	**1.1014**	**0.0242**	**2.0671**	**1.1000e-004**		**0.0115**	**0.0115**		**0.0115**	**0.0115**	**0.0000**	**3.8617**	**3.8617**	**3.2700e-003**	**1.0000e-005**	**3.9460**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	47.0635	0.0218	0.0122	51.2470
Unmitigated	47.0635	0.0218	0.0122	51.2470

Del Amo Circle Apt - 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

7.2 Water by Land Use

Unmitigated

Land Use	Indoor/Outdoor Use Mgal	Total CO2 MT/yr	CH4 MT/yr	N2O MT/yr	CO2e MT/yr
Apartments Mid Rise	15.3891 / 0.317217	47.0635	0.0218	0.0122	51.2470
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**47.0635**	**0.0218**	**0.0122**	**51.2470**

Mitigated

Land Use	Indoor/Outdoor Use Mgal	Total CO2 MT/yr	CH4 MT/yr	N2O MT/yr	CO2e MT/yr
Apartments Mid Rise	15.3891 / 0.317217	47.0635	0.0218	0.0122	51.2470
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**47.0635**	**0.0218**	**0.0122**	**51.2470**

Del Amo Circle Apt - 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

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	18.6752	1.1037	0.0000	46.2669
Unmitigated	18.6752	1.1037	0.0000	46.2669

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	92	18.6752	1.1037	0.0000	46.2669
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**18.6752**	**1.1037**	**0.0000**	**46.2669**

Del Amo Circle Apt - 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

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	92	18.6752	1.1037	0.0000	46.2669
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**18.6752**	**1.1037**	**0.0000**	**46.2669**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Del Amo Circle Apt_Construction Mitigation - Los Angeles-South Coast County, Summer

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

Del Amo Circle Apt_Construction Mitigation

Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Mid Rise	200.00	Dwelling Unit	1.08	240,556.00	572
Enclosed Parking with Elevator	440.00	Space	0.55	169,946.00	0
Other Asphalt Surfaces	19.40	1000sqft	0.45	19,400.00	0
Other Non-Asphalt Surfaces	37.11	1000sqft	0.85	11,011.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	8			**Operational Year**	2025
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	449.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Based on the CO2e intensity of 452 lbs/MWh per the Southern California Edison 2021 Sustainability Report.

Land Use - Based on information provided by the applicant.

Construction Phase - Based on information provided/verified by the Applicant and CalEEMod defaults.

Grading -

Demolition -

Trips and VMT - Assumes water trucks for demolition, site preparation, and grading. See assumptions in the AQ/GHG appendix.

Architectural Coating - Assumes architectural coating and striping of parking structure and striping of the proposed accessway. See assumptions in the AQ/GHG appendix.

Vehicle Trips - Based on information provided by LLG.

Woodstoves - Accounts for the two firepits for resident use. Assumes no wood stoves per South Coast AQMD Rule 445 and no fireplaces for dwelling units per the site plan.

Area Coating - Assumes architectural coating and striping for the parking structure and striping for the accessway.

Water And Wastewater - See assumptions in the AQ/GHG appendix.

Del Amo Circle Apt_Construction Mitigation - Los Angeles-South Coast County, Summer

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

Construction Off-road Equipment Mitigation - Based on South Coast AQMD Rules 403 and 1186.

Water Mitigation -

Area Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	0.00	84,973.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	0.00	254,919.00
tblArchitecturalCoating	ConstArea_Parking	12,021.00	11,361.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblArchitecturalCoating	EF_Residential_Exterior	50.00	25.00
tblArchitecturalCoating	EF_Residential_Interior	50.00	25.00
tblAreaCoating	Area_Nonresidential_Exterior	0	84973
tblAreaCoating	Area_Nonresidential_Interior	0	254919
tblAreaCoating	Area_Parking	12021	11361
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	10.00	23.00
tblConstructionPhase	NumDays	220.00	515.00
tblConstructionPhase	NumDays	20.00	18.00
tblConstructionPhase	NumDays	6.00	59.00
tblConstructionPhase	NumDays	10.00	21.00
tblConstructionPhase	NumDays	3.00	8.00
tblConstructionPhase	PhaseEndDate	8/22/2024	11/28/2025
tblConstructionPhase	PhaseEndDate	7/25/2024	11/28/2025
tblConstructionPhase	PhaseEndDate	9/8/2023	9/6/2023
tblConstructionPhase	PhaseEndDate	9/21/2023	12/8/2023
tblConstructionPhase	PhaseEndDate	8/8/2024	12/15/2025
tblConstructionPhase	PhaseEndDate	9/13/2023	9/18/2023
tblConstructionPhase	PhaseStartDate	8/9/2024	10/29/2025
tblConstructionPhase	PhaseStartDate	9/22/2023	12/9/2023

Del Amo Circle Apt_Construction Mitigation - Los Angeles-South Coast County, Summer

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

tblConstructionPhase	PhaseStartDate	9/14/2023	9/19/2023
tblConstructionPhase	PhaseStartDate	7/26/2024	11/15/2025
tblConstructionPhase	PhaseStartDate	9/9/2023	9/7/2023
tblFireplaces	NumberGas	170.00	2.00
tblFireplaces	NumberNoFireplace	20.00	198.00
tblFireplaces	NumberWood	10.00	0.00
tblGrading	MaterialExported	0.00	10,700.00
tblGrading	MaterialExported	0.00	500.00
tblLandUse	LandUseSquareFeet	200,000.00	240,556.00
tblLandUse	LandUseSquareFeet	176,000.00	169,946.00
tblLandUse	LandUseSquareFeet	37,111.00	11,011.00
tblLandUse	LotAcreage	5.26	1.08
tblLandUse	LotAcreage	3.96	0.55
tblProjectCharacteristics	CO2IntensityFactor	390.98	449.98
tblTripsAndVMT	HaulingTripNumber	63.00	62.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblVehicleTrips	ST_TR	4.91	4.57
tblVehicleTrips	SU_TR	4.09	3.77
tblVehicleTrips	WD_TR	5.44	4.54
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	IndoorWaterUseRate	13,030,805.12	15,389,130.00
tblWater	OutdoorWaterUseRate	8,215,072.80	317,217.00
tblWater	SepticTankPercent	10.33	0.00
tblWoodstoves	NumberCatalytic	10.00	0.00
tblWoodstoves	NumberNoncatalytic	10.00	0.00

Del Amo Circle Apt_Construction Mitigation - Los Angeles-South Coast County, Summer

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

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

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	lb/day										lb/day					
2023	2.5055	17.8330	23.2573	0.0576	7.6759	0.6930	8.3015	3.5848	0.6484	4.1611	0.0000	5,651.2205	5,651.2205	0.8043	0.2625	5,726.4061
2024	2.3372	15.3544	22.5428	0.0568	2.8944	0.5632	3.4576	0.7755	0.5388	1.3143	0.0000	5,570.4816	5,570.4816	0.5149	0.2023	5,643.6249
2025	72.6256	23.1898	37.2879	0.0824	3.5762	0.9000	4.4762	0.9563	0.8511	1.8073	0.0000	8,040.0813	8,040.0813	1.0733	0.2086	8,129.0783
Maximum	**72.6256**	**23.1898**	**37.2879**	**0.0824**	**7.6759**	**0.9000**	**8.3015**	**3.5848**	**0.8511**	**4.1611**	**0.0000**	**8,040.0813**	**8,040.0813**	**1.0733**	**0.2625**	**8,129.0783**

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	lb/day										lb/day					
2023	2.5055	17.8330	23.2573	0.0576	3.5695	0.6930	4.1951	1.6126	0.6484	2.1889	0.0000	5,651.2205	5,651.2205	0.8043	0.2625	5,726.4061
2024	2.3372	15.3544	22.5428	0.0568	2.6728	0.5632	3.2361	0.7211	0.5388	1.2599	0.0000	5,570.4816	5,570.4816	0.5149	0.2023	5,643.6249
2025	72.6256	23.1898	37.2879	0.0824	3.3013	0.9000	4.2013	0.8888	0.8511	1.7399	0.0000	8,040.0813	8,040.0813	1.0733	0.2086	8,129.0783
Maximum	**72.6256**	**23.1898**	**37.2879**	**0.0824**	**3.5695**	**0.9000**	**4.2013**	**1.6126**	**0.8511**	**2.1889**	**0.0000**	**8,040.0813**	**8,040.0813**	**1.0733**	**0.2625**	**8,129.0783**

Del Amo Circle Apt_Construction Mitigation - Los Angeles-South Coast County, Summer

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	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**32.54**	**0.00**	**28.35**	**39.39**	**0.00**	**28.75**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

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	6.1959	0.2235	16.5493	1.0900e-003		0.0943	0.0943		0.0943	0.0943	0.0000	72.1721	72.1721	0.0296	7.8000e-004	73.1421
Energy	0.0659	0.5630	0.2396	3.5900e-003		0.0455	0.0455		0.0455	0.0455		718.7507	718.7507	0.0138	0.0132	723.0219
Mobile	2.6751	2.6618	27.0063	0.0609	6.5761	0.0430	6.6192	1.7518	0.0400	1.7917		6,212.7697	6,212.7697	0.4038	0.2478	6,296.7176
Total	**8.9369**	**3.4483**	**43.7952**	**0.0656**	**6.5761**	**0.1829**	**6.7590**	**1.7518**	**0.1798**	**1.9316**	**0.0000**	**7,003.6924**	**7,003.6924**	**0.4472**	**0.2618**	**7,092.8816**

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	6.1959	0.2235	16.5493	1.0900e-003		0.0943	0.0943		0.0943	0.0943	0.0000	72.1721	72.1721	0.0296	7.8000e-004	73.1421
Energy	0.0659	0.5630	0.2396	3.5900e-003		0.0455	0.0455		0.0455	0.0455		718.7507	718.7507	0.0138	0.0132	723.0219
Mobile	2.6751	2.6618	27.0063	0.0609	6.5761	0.0430	6.6192	1.7518	0.0400	1.7917		6,212.7697	6,212.7697	0.4038	0.2478	6,296.7176
Total	**8.9369**	**3.4483**	**43.7952**	**0.0656**	**6.5761**	**0.1829**	**6.7590**	**1.7518**	**0.1798**	**1.9316**	**0.0000**	**7,003.6924**	**7,003.6924**	**0.4472**	**0.2618**	**7,092.8816**

Del Amo Circle Apt_Construction Mitigation - Los Angeles-South Coast County, Summer

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	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	8/14/2023	9/6/2023	5	18	
2	Site Preparation	Site Preparation	9/7/2023	9/18/2023	5	8	
3	Grading	Grading	9/19/2023	12/8/2023	5	59	
4	Building Construction	Building Construction	12/9/2023	11/28/2025	5	515	
5	Paving	Paving	11/15/2025	12/15/2025	5	21	
6	Architectural Coating	Architectural Coating	10/29/2025	11/28/2025	5	23	

Acres of Grading (Site Preparation Phase): 12

Acres of Grading (Grading Phase): 59

Acres of Paving: 1.85

Residential Indoor: 487,126; Residential Outdoor: 162,375; Non-Residential Indoor: 254,919; Non-Residential Outdoor: 84,973; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74

Del Amo Circle Apt_Construction Mitigation - Los Angeles-South Coast County, Summer

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

Grading	Graders	1	8.00	187	0.41
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Site Preparation	Scrapers	1	8.00	367	0.48
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45

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	5	13.00	4.00	321.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	10.00	62.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	10.00	1,338.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	228.00	54.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	46.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

Del Amo Circle Apt_Construction Mitigation - Los Angeles-South Coast County, Summer

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

3.2 Demolition - 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					3.8637	0.0000	3.8637	0.5850	0.0000	0.5850			0.0000			0.0000
Off-Road	1.4725	14.3184	13.4577	0.0241		0.6766	0.6766		0.6328	0.6328		2,324.3959	2,324.3959	0.5893		2,339.1278
Total	**1.4725**	**14.3184**	**13.4577**	**0.0241**	**3.8637**	**0.6766**	**4.5404**	**0.5850**	**0.6328**	**1.2178**		**2,324.3959**	**2,324.3959**	**0.5893**		**2,339.1278**

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	0.0387	2.3271	0.6211	0.0104	0.3122	0.0147	0.3268	0.0856	0.0140	0.0996		1,146.0772	1,146.0772	0.0632	0.1820	1,201.8909
Vendor	4.6100e-003	0.1535	0.0595	7.4000e-004	0.0256	7.7000e-004	0.0264	7.3800e-003	7.4000e-004	8.1200e-003		80.1130	80.1130	2.6800e-003	0.0115	83.6124
Worker	0.0416	0.0290	0.4698	1.2900e-003	0.1453	8.7000e-004	0.1462	0.0385	8.0000e-004	0.0393		130.0098	130.0098	3.2800e-003	3.0000e-003	130.9859
Total	**0.0849**	**2.5096**	**1.1504**	**0.0125**	**0.4831**	**0.0163**	**0.4994**	**0.1315**	**0.0156**	**0.1471**		**1,356.2000**	**1,356.2000**	**0.0691**	**0.1965**	**1,416.4892**

Del Amo Circle Apt_Construction Mitigation - Los Angeles-South Coast County, Summer

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					1.6517	0.0000	1.6517	0.2501	0.0000	0.2501			0.0000			0.0000
Off-Road	1.4725	14.3184	13.4577	0.0241		0.6766	0.6766		0.6328	0.6328	0.0000	2,324.3959	2,324.3959	0.5893		2,339.1278
Total	**1.4725**	**14.3184**	**13.4577**	**0.0241**	**1.6517**	**0.6766**	**2.3284**	**0.2501**	**0.6328**	**0.8829**	**0.0000**	**2,324.3959**	**2,324.3959**	**0.5893**		**2,339.1278**

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	0.0387	2.3271	0.6211	0.0104	0.2909	0.0147	0.3056	0.0804	0.0140	0.0944		1,146.0772	1,146.0772	0.0632	0.1820	1,201.8909
Vendor	4.6100e-003	0.1535	0.0595	7.4000e-004	0.0240	7.7000e-004	0.0248	6.9700e-003	7.4000e-004	7.7100e-003		80.1130	80.1130	2.6800e-003	0.0115	83.6124
Worker	0.0416	0.0290	0.4698	1.2900e-003	0.1339	8.7000e-004	0.1348	0.0358	8.0000e-004	0.0366		130.0098	130.0098	3.2800e-003	3.0000e-003	130.9859
Total	**0.0849**	**2.5096**	**1.1504**	**0.0125**	**0.4489**	**0.0163**	**0.4652**	**0.1231**	**0.0156**	**0.1387**		**1,356.2000**	**1,356.2000**	**0.0691**	**0.1965**	**1,416.4892**

Del Amo Circle Apt_Construction Mitigation - Los Angeles-South Coast County, Summer

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

3.3 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.5978	0.0000	1.5978	0.1728	0.0000	0.1728			0.0000			0.0000
Off-Road	1.3027	14.2802	9.7820	0.0245		0.5419	0.5419		0.4985	0.4985		2,374.8634	2,374.8634	0.7681		2,394.0654
Total	**1.3027**	**14.2802**	**9.7820**	**0.0245**	**1.5978**	**0.5419**	**2.1397**	**0.1728**	**0.4985**	**0.6714**		**2,374.8634**	**2,374.8634**	**0.7681**		**2,394.0654**

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	0.0168	1.0113	0.2699	4.5300e-003	0.1357	6.3800e-003	0.1420	0.0372	6.1000e-003	0.0433		498.0616	498.0616	0.0275	0.0791	522.3171
Vendor	0.0115	0.3838	0.1487	1.8600e-003	0.0641	1.9300e-003	0.0660	0.0184	1.8500e-003	0.0203		200.2825	200.2825	6.7100e-003	0.0288	209.0311
Worker	0.0256	0.0179	0.2891	7.9000e-004	0.0894	5.4000e-004	0.0900	0.0237	5.0000e-004	0.0242		80.0060	80.0060	2.0200e-003	1.8500e-003	80.6067
Total	**0.0539**	**1.4130**	**0.7077**	**7.1800e-003**	**0.2891**	**8.8500e-003**	**0.2980**	**0.0793**	**8.4500e-003**	**0.0878**		**778.3501**	**778.3501**	**0.0362**	**0.1097**	**811.9549**

Del Amo Circle Apt_Construction Mitigation - Los Angeles-South Coast County, Summer

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					0.6831	0.0000	0.6831	0.0739	0.0000	0.0739			0.0000			0.0000
Off-Road	1.3027	14.2802	9.7820	0.0245		0.5419	0.5419		0.4985	0.4985	0.0000	2,374.8634	2,374.8634	0.7681		2,394.0654
Total	**1.3027**	**14.2802**	**9.7820**	**0.0245**	**0.6831**	**0.5419**	**1.2250**	**0.0739**	**0.4985**	**0.5724**	**0.0000**	**2,374.8634**	**2,374.8634**	**0.7681**		**2,394.0654**

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	0.0168	1.0113	0.2699	4.5300e-003	0.1264	6.3800e-003	0.1328	0.0349	6.1000e-003	0.0410		498.0616	498.0616	0.0275	0.0791	522.3171
Vendor	0.0115	0.3838	0.1487	1.8600e-003	0.0600	1.9300e-003	0.0619	0.0174	1.8500e-003	0.0193		200.2825	200.2825	6.7100e-003	0.0288	209.0311
Worker	0.0256	0.0179	0.2891	7.9000e-004	0.0824	5.4000e-004	0.0830	0.0220	5.0000e-004	0.0225		80.0060	80.0060	2.0200e-003	1.8500e-003	80.6067
Total	**0.0539**	**1.4130**	**0.7077**	**7.1800e-003**	**0.2688**	**8.8500e-003**	**0.2777**	**0.0744**	**8.4500e-003**	**0.0828**		**778.3501**	**778.3501**	**0.0362**	**0.1097**	**811.9549**

Del Amo Circle Apt_Construction Mitigation - Los Angeles-South Coast County, Summer

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

3.4 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					7.1031	0.0000	7.1031	3.4278	0.0000	3.4278			0.0000			0.0000
Off-Road	1.3330	14.4676	8.7038	0.0206		0.6044	0.6044		0.5560	0.5560		1,995.6147	1,995.6147	0.6454		2,011.7503
Total	**1.3330**	**14.4676**	**8.7038**	**0.0206**	**7.1031**	**0.6044**	**7.7075**	**3.4278**	**0.5560**	**3.9838**		**1,995.6147**	**1,995.6147**	**0.6454**		**2,011.7503**

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	0.0492	2.9592	0.7898	0.0133	0.3970	0.0187	0.4156	0.1088	0.0179	0.1267		1,457.4224	1,457.4224	0.0803	0.2314	1,528.3985
Vendor	0.0115	0.3838	0.1487	1.8600e-003	0.0641	1.9300e-003	0.0660	0.0184	1.8500e-003	0.0203		200.2825	200.2825	6.7100e-003	0.0288	209.0311
Worker	0.0320	0.0223	0.3614	9.9000e-004	0.1118	6.7000e-004	0.1125	0.0296	6.2000e-004	0.0303		100.0075	100.0075	2.5200e-003	2.3100e-003	100.7583
Total	**0.0927**	**3.3654**	**1.2999**	**0.0161**	**0.5728**	**0.0213**	**0.5941**	**0.1569**	**0.0203**	**0.1772**		**1,757.7124**	**1,757.7124**	**0.0896**	**0.2625**	**1,838.1880**

Del Amo Circle Apt_Construction Mitigation - Los Angeles-South Coast County, Summer

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					3.0366	0.0000	3.0366	1.4654	0.0000	1.4654			0.0000			0.0000
Off-Road	1.3330	14.4676	8.7038	0.0206		0.6044	0.6044		0.5560	0.5560	0.0000	1,995.6147	1,995.6147	0.6454		2,011.7503
Total	**1.3330**	**14.4676**	**8.7038**	**0.0206**	**3.0366**	**0.6044**	**3.6409**	**1.4654**	**0.5560**	**2.0214**	**0.0000**	**1,995.6147**	**1,995.6147**	**0.6454**		**2,011.7503**

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	0.0492	2.9592	0.7898	0.0133	0.3700	0.0187	0.3886	0.1022	0.0179	0.1201		1,457.4224	1,457.4224	0.0803	0.2314	1,528.3985
Vendor	0.0115	0.3838	0.1487	1.8600e-003	0.0600	1.9300e-003	0.0619	0.0174	1.8500e-003	0.0193		200.2825	200.2825	6.7100e-003	0.0288	209.0311
Worker	0.0320	0.0223	0.3614	9.9000e-004	0.1030	6.7000e-004	0.1037	0.0275	6.2000e-004	0.0281		100.0075	100.0075	2.5200e-003	2.3100e-003	100.7583
Total	**0.0927**	**3.3654**	**1.2999**	**0.0161**	**0.5330**	**0.0213**	**0.5542**	**0.1472**	**0.0203**	**0.1675**		**1,757.7124**	**1,757.7124**	**0.0896**	**0.2625**	**1,838.1880**

Del Amo Circle Apt_Construction Mitigation - Los Angeles-South Coast County, Summer

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

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	1.7136	13.6239	14.2145	0.0250		0.6136	0.6136		0.5880	0.5880		2,289.5233	2,289.5233	0.4330		2,300.3479
Total	**1.7136**	**13.6239**	**14.2145**	**0.0250**		**0.6136**	**0.6136**		**0.5880**	**0.5880**		**2,289.5233**	**2,289.5233**	**0.4330**		**2,300.3479**

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		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0622	2.0727	0.8030	0.0101	0.3459	0.0104	0.3563	0.0996	9.9700e-003	0.1096		1,081.5254	1,081.5254	0.0362	0.1555	1,128.7680
Worker	0.7297	0.5087	8.2399	0.0226	2.5485	0.0153	2.5638	0.6759	0.0141	0.6900		2,280.1719	2,280.1719	0.0575	0.0526	2,297.2903
Total	**0.7918**	**2.5814**	**9.0429**	**0.0326**	**2.8944**	**0.0258**	**2.9201**	**0.7755**	**0.0241**	**0.7996**		**3,361.6972**	**3,361.6972**	**0.0937**	**0.2081**	**3,426.0582**

Del Amo Circle Apt_Construction Mitigation - Los Angeles-South Coast County, Summer

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	1.7136	13.6239	14.2145	0.0250		0.6136	0.6136		0.5880	0.5880	0.0000	2,289.5233	2,289.5233	0.4330		2,300.3479
Total	**1.7136**	**13.6239**	**14.2145**	**0.0250**		**0.6136**	**0.6136**		**0.5880**	**0.5880**	**0.0000**	**2,289.5233**	**2,289.5233**	**0.4330**		**2,300.3479**

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		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0622	2.0727	0.8030	0.0101	0.3237	0.0104	0.3341	0.0942	9.9700e-003	0.1041		1,081.5254	1,081.5254	0.0362	0.1555	1,128.7680
Worker	0.7297	0.5087	8.2399	0.0226	2.3491	0.0153	2.3644	0.6269	0.0141	0.6410		2,280.1719	2,280.1719	0.0575	0.0526	2,297.2903
Total	**0.7918**	**2.5814**	**9.0429**	**0.0326**	**2.6728**	**0.0258**	**2.6986**	**0.7211**	**0.0241**	**0.7452**		**3,361.6972**	**3,361.6972**	**0.0937**	**0.2081**	**3,426.0582**

Del Amo Circle Apt_Construction Mitigation - Los Angeles-South Coast County, Summer

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

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	1.5971	12.8235	14.1002	0.0250		0.5381	0.5381		0.5153	0.5153		2,289.6541	2,289.6541	0.4265		2,300.3154
Total	**1.5971**	**12.8235**	**14.1002**	**0.0250**		**0.5381**	**0.5381**		**0.5153**	**0.5153**		**2,289.6541**	**2,289.6541**	**0.4265**		**2,300.3154**

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		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0603	2.0769	0.7859	9.8900e-003	0.3459	0.0105	0.3564	0.0996	0.0100	0.1096		1,065.2829	1,065.2829	0.0364	0.1533	1,111.8816
Worker	0.6798	0.4540	7.6568	0.0219	2.5485	0.0147	2.5632	0.6759	0.0135	0.6894		2,215.5446	2,215.5446	0.0520	0.0489	2,231.4279
Total	**0.7401**	**2.5309**	**8.4427**	**0.0318**	**2.8944**	**0.0252**	**2.9196**	**0.7755**	**0.0235**	**0.7990**		**3,280.8275**	**3,280.8275**	**0.0884**	**0.2023**	**3,343.3096**

Del Amo Circle Apt_Construction Mitigation - Los Angeles-South Coast County, Summer

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	1.5971	12.8235	14.1002	0.0250		0.5381	0.5381		0.5153	0.5153	0.0000	2,289.6541	2,289.6541	0.4265		2,300.3154
Total	**1.5971**	**12.8235**	**14.1002**	**0.0250**		**0.5381**	**0.5381**		**0.5153**	**0.5153**	**0.0000**	**2,289.6541**	**2,289.6541**	**0.4265**		**2,300.3154**

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		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0603	2.0769	0.7859	9.8900e-003	0.3237	0.0105	0.3342	0.0942	0.0100	0.1042		1,065.2829	1,065.2829	0.0364	0.1533	1,111.8816
Worker	0.6798	0.4540	7.6568	0.0219	2.3491	0.0147	2.3638	0.6269	0.0135	0.6404		2,215.5446	2,215.5446	0.0520	0.0489	2,231.4279
Total	**0.7401**	**2.5309**	**8.4427**	**0.0318**	**2.6728**	**0.0252**	**2.6980**	**0.7211**	**0.0235**	**0.7446**		**3,280.8275**	**3,280.8275**	**0.0884**	**0.2023**	**3,343.3096**

Del Amo Circle Apt_Construction Mitigation - Los Angeles-South Coast County, Summer

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

3.5 Building Construction - 2025

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	1.4897	12.0233	14.0072	0.0250		0.4700	0.4700		0.4498	0.4498		2,289.8898	2,289.8898	0.4200		2,300.3887
Total	**1.4897**	**12.0233**	**14.0072**	**0.0250**		**0.4700**	**0.4700**		**0.4498**	**0.4498**		**2,289.8898**	**2,289.8898**	**0.4200**		**2,300.3887**

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		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0586	2.0671	0.7715	9.7000e-003	0.3459	0.0105	0.3564	0.0996	0.0101	0.1097		1,046.1036	1,046.1036	0.0366	0.1507	1,091.9180
Worker	0.6355	0.4077	7.1211	0.0212	2.5485	0.0140	2.5625	0.6759	0.0129	0.6887		2,140.0705	2,140.0705	0.0469	0.0457	2,154.8636
Total	**0.6940**	**2.4748**	**7.8926**	**0.0309**	**2.8944**	**0.0245**	**2.9189**	**0.7755**	**0.0229**	**0.7984**		**3,186.1740**	**3,186.1740**	**0.0835**	**0.1964**	**3,246.7816**

Del Amo Circle Apt_Construction Mitigation - Los Angeles-South Coast County, Summer

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	1.4897	12.0233	14.0072	0.0250		0.4700	0.4700		0.4498	0.4498	0.0000	2,289.8898	2,289.8898	0.4200		2,300.3887
Total	**1.4897**	**12.0233**	**14.0072**	**0.0250**		**0.4700**	**0.4700**		**0.4498**	**0.4498**	**0.0000**	**2,289.8898**	**2,289.8898**	**0.4200**		**2,300.3887**

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		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0586	2.0671	0.7715	9.7000e-003	0.3237	0.0105	0.3343	0.0942	0.0101	0.1042		1,046.1036	1,046.1036	0.0366	0.1507	1,091.9180
Worker	0.6355	0.4077	7.1211	0.0212	2.3491	0.0140	2.3631	0.6269	0.0129	0.6398		2,140.0705	2,140.0705	0.0469	0.0457	2,154.8636
Total	**0.6940**	**2.4748**	**7.8926**	**0.0309**	**2.6728**	**0.0245**	**2.6973**	**0.7211**	**0.0229**	**0.7440**		**3,186.1740**	**3,186.1740**	**0.0835**	**0.1964**	**3,246.7816**

Del Amo Circle Apt_Construction Mitigation - Los Angeles-South Coast County, Summer

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

3.6 Paving - 2025

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	0.7854	7.4371	11.6737	0.0179		0.3503	0.3503		0.3234	0.3234		1,710.0067	1,710.0067	0.5420		1,723.5556
Paving	0.0561					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.8416**	**7.4371**	**11.6737**	**0.0179**		**0.3503**	**0.3503**		**0.3234**	**0.3234**		**1,710.0067**	**1,710.0067**	**0.5420**		**1,723.5556**

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		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0418	0.0268	0.4685	1.3900e-003	0.1677	9.2000e-004	0.1686	0.0445	8.5000e-004	0.0453		140.7941	140.7941	3.0900e-003	3.0100e-003	141.7673
Total	**0.0418**	**0.0268**	**0.4685**	**1.3900e-003**	**0.1677**	**9.2000e-004**	**0.1686**	**0.0445**	**8.5000e-004**	**0.0453**		**140.7941**	**140.7941**	**3.0900e-003**	**3.0100e-003**	**141.7673**

Del Amo Circle Apt_Construction Mitigation - Los Angeles-South Coast County, Summer

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	0.7854	7.4371	11.6737	0.0179		0.3503	0.3503		0.3234	0.3234	0.0000	1,710.0067	1,710.0067	0.5420		1,723.5556
Paving	0.0561					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.8416**	**7.4371**	**11.6737**	**0.0179**		**0.3503**	**0.3503**		**0.3234**	**0.3234**	**0.0000**	**1,710.0067**	**1,710.0067**	**0.5420**		**1,723.5556**

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		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0418	0.0268	0.4685	1.3900e-003	0.1546	9.2000e-004	0.1555	0.0413	8.5000e-004	0.0421		140.7941	140.7941	3.0900e-003	3.0100e-003	141.7673
Total	**0.0418**	**0.0268**	**0.4685**	**1.3900e-003**	**0.1546**	**9.2000e-004**	**0.1555**	**0.0413**	**8.5000e-004**	**0.0421**		**140.7941**	**140.7941**	**3.0900e-003**	**3.0100e-003**	**141.7673**

Del Amo Circle Apt_Construction Mitigation - Los Angeles-South Coast County, Summer

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

3.7 Architectural Coating - 2025

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	69.2594					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
Total	**69.4303**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**		**281.4481**	**281.4481**	**0.0154**		**281.8319**

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		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1282	0.0823	1.4367	4.2700e-003	0.5142	2.8200e-003	0.5170	0.1364	2.5900e-003	0.1390		431.7686	431.7686	9.4600e-003	9.2200e-003	434.7532
Total	**0.1282**	**0.0823**	**1.4367**	**4.2700e-003**	**0.5142**	**2.8200e-003**	**0.5170**	**0.1364**	**2.5900e-003**	**0.1390**		**431.7686**	**431.7686**	**9.4600e-003**	**9.2200e-003**	**434.7532**

Del Amo Circle Apt_Construction Mitigation - Los Angeles-South Coast County, Summer

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					
Archit. Coating	69.2594					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515	0.0000	281.4481	281.4481	0.0154		281.8319
Total	**69.4303**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**	**0.0000**	**281.4481**	**281.4481**	**0.0154**		**281.8319**

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		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1282	0.0823	1.4367	4.2700e-003	0.4739	2.8200e-003	0.4768	0.1265	2.5900e-003	0.1291		431.7686	431.7686	9.4600e-003	9.2200e-003	434.7532
Total	**0.1282**	**0.0823**	**1.4367**	**4.2700e-003**	**0.4739**	**2.8200e-003**	**0.4768**	**0.1265**	**2.5900e-003**	**0.1291**		**431.7686**	**431.7686**	**9.4600e-003**	**9.2200e-003**	**434.7532**

Del Amo Circle Apt_Construction Mitigation - Los Angeles-South Coast County, Summer

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	lb/day										lb/day					
Mitigated	2.6751	2.6618	27.0063	0.0609	6.5761	0.0430	6.6192	1.7518	0.0400	1.7917		6,212.7697	6,212.7697	0.4038	0.2478	6,296.7176
Unmitigated	2.6751	2.6618	27.0063	0.0609	6.5761	0.0430	6.6192	1.7518	0.0400	1.7917		6,212.7697	6,212.7697	0.4038	0.2478	6,296.7176

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	908.00	914.00	754.00	3,030,526	3,030,526
Enclosed Parking with Elevator	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	908.00	914.00	754.00	3,030,526	3,030,526

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	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
Enclosed Parking with Elevator	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
Other Asphalt Surfaces	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
Other Non-Asphalt Surfaces	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

Del Amo Circle Apt_Construction Mitigation - Los Angeles-South Coast County, Summer

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	lb/day										lb/day					
NaturalGas Mitigated	0.0659	0.5630	0.2396	3.5900e-003		0.0455	0.0455		0.0455	0.0455		718.7507	718.7507	0.0138	0.0132	723.0219
NaturalGas Unmitigated	0.0659	0.5630	0.2396	3.5900e-003		0.0455	0.0455		0.0455	0.0455		718.7507	718.7507	0.0138	0.0132	723.0219

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	lb/day										lb/day					
Apartments Mid Rise	6109.38	0.0659	0.5630	0.2396	3.5900e-003		0.0455	0.0455		0.0455	0.0455		718.7507	718.7507	0.0138	0.0132	723.0219
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0659**	**0.5630**	**0.2396**	**3.5900e-003**		**0.0455**	**0.0455**		**0.0455**	**0.0455**		**718.7507**	**718.7507**	**0.0138**	**0.0132**	**723.0219**

Del Amo Circle Apt_Construction Mitigation - Los Angeles-South Coast County, Summer

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

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	lb/day										lb/day					
Apartments Mid Rise	6.10938	0.0659	0.5630	0.2396	3.5900e-003		0.0455	0.0455		0.0455	0.0455		718.7507	718.7507	0.0138	0.0132	723.0219
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0659**	**0.5630**	**0.2396**	**3.5900e-003**		**0.0455**	**0.0455**		**0.0455**	**0.0455**		**718.7507**	**718.7507**	**0.0138**	**0.0132**	**723.0219**

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	6.1959	0.2235	16.5493	1.0900e-003		0.0943	0.0943		0.0943	0.0943	0.0000	72.1721	72.1721	0.0296	7.8000e-004	73.1421
Unmitigated	6.1959	0.2235	16.5493	1.0900e-003		0.0943	0.0943		0.0943	0.0943	0.0000	72.1721	72.1721	0.0296	7.8000e-004	73.1421

Del Amo Circle Apt_Construction Mitigation - Los Angeles-South Coast County, Summer

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

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	0.8584					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.8340					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	3.8800e-003	0.0332	0.0141	2.1000e-004		2.6800e-003	2.6800e-003		2.6800e-003	2.6800e-003	0.0000	42.3529	42.3529	8.1000e-004	7.8000e-004	42.6046
Landscaping	0.4996	0.1903	16.5352	8.8000e-004		0.0917	0.0917		0.0917	0.0917		29.8191	29.8191	0.0287		30.5375
Total	**6.1959**	**0.2235**	**16.5493**	**1.0900e-003**		**0.0943**	**0.0943**		**0.0943**	**0.0943**	**0.0000**	**72.1721**	**72.1721**	**0.0295**	**7.8000e-004**	**73.1421**

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	0.8584					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.8340					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	3.8800e-003	0.0332	0.0141	2.1000e-004		2.6800e-003	2.6800e-003		2.6800e-003	2.6800e-003	0.0000	42.3529	42.3529	8.1000e-004	7.8000e-004	42.6046
Landscaping	0.4996	0.1903	16.5352	8.8000e-004		0.0917	0.0917		0.0917	0.0917		29.8191	29.8191	0.0287		30.5375
Total	**6.1959**	**0.2235**	**16.5493**	**1.0900e-003**		**0.0943**	**0.0943**		**0.0943**	**0.0943**	**0.0000**	**72.1721**	**72.1721**	**0.0295**	**7.8000e-004**	**73.1421**

Del Amo Circle Apt_Construction Mitigation - Los Angeles-South Coast County, Summer

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

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Del Amo Circle Apt_Construction Mitigation - 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

Del Amo Circle Apt_Construction Mitigation

Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Mid Rise	200.00	Dwelling Unit	1.08	240,556.00	572
Enclosed Parking with Elevator	440.00	Space	0.55	169,946.00	0
Other Asphalt Surfaces	19.40	1000sqft	0.45	19,400.00	0
Other Non-Asphalt Surfaces	37.11	1000sqft	0.85	11,011.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	8			**Operational Year**	2025
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	449.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Based on the CO2e intensity of 452 lbs/MWh per the Southern California Edison 2021 Sustainability Report.

Land Use - Based on information provided by the applicant.

Construction Phase - Based on information provided/verified by the Applicant and CalEEMod defaults.

Grading -

Demolition -

Trips and VMT - Assumes water trucks for demolition, site preparation, and grading. See assumptions in the AQ/GHG appendix.

Architectural Coating - Assumes architectural coating and striping of parking structure and striping of the proposed accessway. See assumptions in the AQ/GHG appendix.

Vehicle Trips - Based on information provided by LLG.

Woodstoves - Accounts for the two firepits for resident use. Assumes no wood stoves per South Coast AQMD Rule 445 and no fireplaces for dwelling units per the site plan.

Area Coating - Assumes architectural coating and striping for the parking structure and striping for the accessway.

Water And Wastewater - See assumptions in the AQ/GHG appendix.

Del Amo Circle Apt_Construction Mitigation - 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

Construction Off-road Equipment Mitigation - Based on South Coast AQMD Rules 403 and 1186.

Water Mitigation -

Area Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	0.00	84,973.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	0.00	254,919.00
tblArchitecturalCoating	ConstArea_Parking	12,021.00	11,361.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblArchitecturalCoating	EF_Residential_Exterior	50.00	25.00
tblArchitecturalCoating	EF_Residential_Interior	50.00	25.00
tblAreaCoating	Area_Nonresidential_Exterior	0	84973
tblAreaCoating	Area_Nonresidential_Interior	0	254919
tblAreaCoating	Area_Parking	12021	11361
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	10.00	23.00
tblConstructionPhase	NumDays	220.00	515.00
tblConstructionPhase	NumDays	20.00	18.00
tblConstructionPhase	NumDays	6.00	59.00
tblConstructionPhase	NumDays	10.00	21.00
tblConstructionPhase	NumDays	3.00	8.00
tblConstructionPhase	PhaseEndDate	8/22/2024	11/28/2025
tblConstructionPhase	PhaseEndDate	7/25/2024	11/28/2025
tblConstructionPhase	PhaseEndDate	9/8/2023	9/6/2023
tblConstructionPhase	PhaseEndDate	9/21/2023	12/8/2023
tblConstructionPhase	PhaseEndDate	8/8/2024	12/15/2025
tblConstructionPhase	PhaseEndDate	9/13/2023	9/18/2023
tblConstructionPhase	PhaseStartDate	8/9/2024	10/29/2025
tblConstructionPhase	PhaseStartDate	9/22/2023	12/9/2023

Del Amo Circle Apt_Construction Mitigation - 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

tblConstructionPhase	PhaseStartDate	9/14/2023	9/19/2023
tblConstructionPhase	PhaseStartDate	7/26/2024	11/15/2025
tblConstructionPhase	PhaseStartDate	9/9/2023	9/7/2023
tblFireplaces	NumberGas	170.00	2.00
tblFireplaces	NumberNoFireplace	20.00	198.00
tblFireplaces	NumberWood	10.00	0.00
tblGrading	MaterialExported	0.00	10,700.00
tblGrading	MaterialExported	0.00	500.00
tblLandUse	LandUseSquareFeet	200,000.00	240,556.00
tblLandUse	LandUseSquareFeet	176,000.00	169,946.00
tblLandUse	LandUseSquareFeet	37,111.00	11,011.00
tblLandUse	LotAcreage	5.26	1.08
tblLandUse	LotAcreage	3.96	0.55
tblProjectCharacteristics	CO2IntensityFactor	390.98	449.98
tblTripsAndVMT	HaulingTripNumber	63.00	62.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblVehicleTrips	ST_TR	4.91	4.57
tblVehicleTrips	SU_TR	4.09	3.77
tblVehicleTrips	WD_TR	5.44	4.54
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	IndoorWaterUseRate	13,030,805.12	15,389,130.00
tblWater	OutdoorWaterUseRate	8,215,072.80	317,217.00
tblWater	SepticTankPercent	10.33	0.00
tblWoodstoves	NumberCatalytic	10.00	0.00
tblWoodstoves	NumberNoncatalytic	10.00	0.00

Del Amo Circle Apt_Construction Mitigation - 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

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

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	lb/day										lb/day					
2023	2.5576	17.9838	22.6165	0.0565	7.6759	0.6930	8.3016	3.5848	0.6484	4.1611	0.0000	5,532.8392	5,532.8392	0.8042	0.2630	5,609.2328
2024	2.3880	15.4994	21.9551	0.0557	2.8944	0.5633	3.4577	0.7755	0.5389	1.3143	0.0000	5,455.7158	5,455.7158	0.5155	0.2060	5,529.9828
2025	72.6890	23.3409	36.5966	0.0810	3.5762	0.9000	4.4762	0.9563	0.8511	1.8074	0.0000	7,899.4704	7,899.4704	1.0742	0.2129	7,989.7690
Maximum	**72.6890**	**23.3409**	**36.5966**	**0.0810**	**7.6759**	**0.9000**	**8.3016**	**3.5848**	**0.8511**	**4.1611**	**0.0000**	**7,899.4704**	**7,899.4704**	**1.0742**	**0.2630**	**7,989.7690**

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	lb/day										lb/day					
2023	2.5576	17.9838	22.6165	0.0565	3.5695	0.6930	4.1952	1.6126	0.6484	2.1889	0.0000	5,532.8392	5,532.8392	0.8042	0.2630	5,609.2328
2024	2.3880	15.4994	21.9551	0.0557	2.6728	0.5633	3.2361	0.7211	0.5389	1.2600	0.0000	5,455.7158	5,455.7158	0.5155	0.2060	5,529.9828
2025	72.6890	23.3409	36.5966	0.0810	3.3013	0.9000	4.2013	0.8888	0.8511	1.7399	0.0000	7,899.4704	7,899.4704	1.0742	0.2129	7,989.7690
Maximum	**72.6890**	**23.3409**	**36.5966**	**0.0810**	**3.5695**	**0.9000**	**4.2013**	**1.6126**	**0.8511**	**2.1889**	**0.0000**	**7,899.4704**	**7,899.4704**	**1.0742**	**0.2630**	**7,989.7690**

Del Amo Circle Apt_Construction Mitigation - 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	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**32.54**	**0.00**	**28.35**	**39.39**	**0.00**	**28.75**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

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	6.1959	0.2235	16.5493	1.0900e-003		0.0943	0.0943		0.0943	0.0943	0.0000	72.1721	72.1721	0.0296	7.8000e-004	73.1421
Energy	0.0659	0.5630	0.2396	3.5900e-003		0.0455	0.0455		0.0455	0.0455		718.7507	718.7507	0.0138	0.0132	723.0219
Mobile	2.6279	2.8728	26.4579	0.0583	6.5761	0.0430	6.6192	1.7518	0.0400	1.7917		5,951.6712	5,951.6712	0.4147	0.2585	6,039.0774
Total	**8.8897**	**3.6593**	**43.2468**	**0.0630**	**6.5761**	**0.1829**	**6.7590**	**1.7518**	**0.1798**	**1.9316**	**0.0000**	**6,742.5940**	**6,742.5940**	**0.4581**	**0.2725**	**6,835.2413**

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	6.1959	0.2235	16.5493	1.0900e-003		0.0943	0.0943		0.0943	0.0943	0.0000	72.1721	72.1721	0.0296	7.8000e-004	73.1421
Energy	0.0659	0.5630	0.2396	3.5900e-003		0.0455	0.0455		0.0455	0.0455		718.7507	718.7507	0.0138	0.0132	723.0219
Mobile	2.6279	2.8728	26.4579	0.0583	6.5761	0.0430	6.6192	1.7518	0.0400	1.7917		5,951.6712	5,951.6712	0.4147	0.2585	6,039.0774
Total	**8.8897**	**3.6593**	**43.2468**	**0.0630**	**6.5761**	**0.1829**	**6.7590**	**1.7518**	**0.1798**	**1.9316**	**0.0000**	**6,742.5940**	**6,742.5940**	**0.4581**	**0.2725**	**6,835.2413**

Del Amo Circle Apt_Construction Mitigation - 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	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	8/14/2023	9/6/2023	5	18	
2	Site Preparation	Site Preparation	9/7/2023	9/18/2023	5	8	
3	Grading	Grading	9/19/2023	12/8/2023	5	59	
4	Building Construction	Building Construction	12/9/2023	11/28/2025	5	515	
5	Paving	Paving	11/15/2025	12/15/2025	5	21	
6	Architectural Coating	Architectural Coating	10/29/2025	11/28/2025	5	23	

Acres of Grading (Site Preparation Phase): 12

Acres of Grading (Grading Phase): 59

Acres of Paving: 1.85

Residential Indoor: 487,126; Residential Outdoor: 162,375; Non-Residential Indoor: 254,919; Non-Residential Outdoor: 84,973; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74

Del Amo Circle Apt_Construction Mitigation - 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

Grading	Graders	1	8.00	187	0.41
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Site Preparation	Scrapers	1	8.00	367	0.48
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45

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	5	13.00	4.00	321.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	10.00	62.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	10.00	1,338.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	228.00	54.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	46.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

Del Amo Circle Apt_Construction Mitigation - 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

3.2 Demolition - 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					3.8637	0.0000	3.8637	0.5850	0.0000	0.5850			0.0000			0.0000
Off-Road	1.4725	14.3184	13.4577	0.0241		0.6766	0.6766		0.6328	0.6328		2,324.3959	2,324.3959	0.5893		2,339.1278
Total	**1.4725**	**14.3184**	**13.4577**	**0.0241**	**3.8637**	**0.6766**	**4.5404**	**0.5850**	**0.6328**	**1.2178**		**2,324.3959**	**2,324.3959**	**0.5893**		**2,339.1278**

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	0.0362	2.4297	0.6297	0.0104	0.3122	0.0147	0.3269	0.0856	0.0141	0.0997		1,147.2852	1,147.2852	0.0630	0.1822	1,203.1542
Vendor	4.4500e-003	0.1608	0.0614	7.5000e-004	0.0256	7.8000e-004	0.0264	7.3800e-003	7.4000e-004	8.1200e-003		80.2481	80.2481	2.6700e-003	0.0116	83.7564
Worker	0.0447	0.0320	0.4318	1.2200e-003	0.1453	8.7000e-004	0.1462	0.0385	8.0000e-004	0.0393		123.1560	123.1560	3.3200e-003	3.2000e-003	124.1941
Total	**0.0853**	**2.6225**	**1.1228**	**0.0124**	**0.4831**	**0.0164**	**0.4995**	**0.1315**	**0.0156**	**0.1471**		**1,350.6893**	**1,350.6893**	**0.0690**	**0.1969**	**1,411.1047**

Del Amo Circle Apt_Construction Mitigation - 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					1.6517	0.0000	1.6517	0.2501	0.0000	0.2501			0.0000			0.0000
Off-Road	1.4725	14.3184	13.4577	0.0241		0.6766	0.6766		0.6328	0.6328	0.0000	2,324.3959	2,324.3959	0.5893		2,339.1278
Total	**1.4725**	**14.3184**	**13.4577**	**0.0241**	**1.6517**	**0.6766**	**2.3284**	**0.2501**	**0.6328**	**0.8829**	**0.0000**	**2,324.3959**	**2,324.3959**	**0.5893**		**2,339.1278**

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	0.0362	2.4297	0.6297	0.0104	0.2909	0.0147	0.3057	0.0804	0.0141	0.0945		1,147.2852	1,147.2852	0.0630	0.1822	1,203.1542
Vendor	4.4500e-003	0.1608	0.0614	7.5000e-004	0.0240	7.8000e-004	0.0248	6.9700e-003	7.4000e-004	7.7200e-003		80.2481	80.2481	2.6700e-003	0.0116	83.7564
Worker	0.0447	0.0320	0.4318	1.2200e-003	0.1339	8.7000e-004	0.1348	0.0358	8.0000e-004	0.0366		123.1560	123.1560	3.3200e-003	3.2000e-003	124.1941
Total	**0.0853**	**2.6225**	**1.1228**	**0.0124**	**0.4489**	**0.0164**	**0.4652**	**0.1231**	**0.0156**	**0.1387**		**1,350.6893**	**1,350.6893**	**0.0690**	**0.1969**	**1,411.1047**

Del Amo Circle Apt_Construction Mitigation - 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

3.3 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.5978	0.0000	1.5978	0.1728	0.0000	0.1728			0.0000			0.0000
Off-Road	1.3027	14.2802	9.7820	0.0245		0.5419	0.5419		0.4985	0.4985		2,374.8634	2,374.8634	0.7681		2,394.0654
Total	**1.3027**	**14.2802**	**9.7820**	**0.0245**	**1.5978**	**0.5419**	**2.1397**	**0.1728**	**0.4985**	**0.6714**		**2,374.8634**	**2,374.8634**	**0.7681**		**2,394.0654**

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	0.0157	1.0559	0.2736	4.5400e-003	0.1357	6.4000e-003	0.1421	0.0372	6.1200e-003	0.0433		498.5866	498.5866	0.0274	0.0792	522.8661
Vendor	0.0111	0.4019	0.1534	1.8600e-003	0.0641	1.9400e-003	0.0660	0.0184	1.8600e-003	0.0203		200.6203	200.6203	6.6800e-003	0.0289	209.3911
Worker	0.0275	0.0197	0.2658	7.5000e-004	0.0894	5.4000e-004	0.0900	0.0237	5.0000e-004	0.0242		75.7883	75.7883	2.0500e-003	1.9700e-003	76.4271
Total	**0.0544**	**1.4775**	**0.6928**	**7.1500e-003**	**0.2891**	**8.8800e-003**	**0.2980**	**0.0793**	**8.4800e-003**	**0.0878**		**774.9952**	**774.9952**	**0.0361**	**0.1100**	**808.6843**

Del Amo Circle Apt_Construction Mitigation - 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					0.6831	0.0000	0.6831	0.0739	0.0000	0.0739			0.0000			0.0000
Off-Road	1.3027	14.2802	9.7820	0.0245		0.5419	0.5419		0.4985	0.4985	0.0000	2,374.8634	2,374.8634	0.7681		2,394.0654
Total	**1.3027**	**14.2802**	**9.7820**	**0.0245**	**0.6831**	**0.5419**	**1.2250**	**0.0739**	**0.4985**	**0.5724**	**0.0000**	**2,374.8634**	**2,374.8634**	**0.7681**		**2,394.0654**

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	0.0157	1.0559	0.2736	4.5400e-003	0.1264	6.4000e-003	0.1328	0.0349	6.1200e-003	0.0411		498.5866	498.5866	0.0274	0.0792	522.8661
Vendor	0.0111	0.4019	0.1534	1.8600e-003	0.0600	1.9400e-003	0.0619	0.0174	1.8600e-003	0.0193		200.6203	200.6203	6.6800e-003	0.0289	209.3911
Worker	0.0275	0.0197	0.2658	7.5000e-004	0.0824	5.4000e-004	0.0830	0.0220	5.0000e-004	0.0225		75.7883	75.7883	2.0500e-003	1.9700e-003	76.4271
Total	**0.0544**	**1.4775**	**0.6928**	**7.1500e-003**	**0.2688**	**8.8800e-003**	**0.2777**	**0.0744**	**8.4800e-003**	**0.0828**		**774.9952**	**774.9952**	**0.0361**	**0.1100**	**808.6843**

Del Amo Circle Apt_Construction Mitigation - 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

3.4 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					7.1031	0.0000	7.1031	3.4278	0.0000	3.4278			0.0000			0.0000
Off-Road	1.3330	14.4676	8.7038	0.0206		0.6044	0.6044		0.5560	0.5560		1,995.6147	1,995.6147	0.6454		2,011.7503
Total	**1.3330**	**14.4676**	**8.7038**	**0.0206**	**7.1031**	**0.6044**	**7.7075**	**3.4278**	**0.5560**	**3.9838**		**1,995.6147**	**1,995.6147**	**0.6454**		**2,011.7503**

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	0.0460	3.0897	0.8007	0.0133	0.3970	0.0187	0.4157	0.1088	0.0179	0.1267		1,458.9586	1,458.9586	0.0802	0.2317	1,530.0050
Vendor	0.0111	0.4019	0.1534	1.8600e-003	0.0641	1.9400e-003	0.0660	0.0184	1.8600e-003	0.0203		200.6203	200.6203	6.6800e-003	0.0289	209.3911
Worker	0.0344	0.0246	0.3322	9.4000e-004	0.1118	6.7000e-004	0.1125	0.0296	6.2000e-004	0.0303		94.7354	94.7354	2.5600e-003	2.4700e-003	95.5339
Total	**0.0915**	**3.5162**	**1.2863**	**0.0161**	**0.5728**	**0.0213**	**0.5941**	**0.1569**	**0.0204**	**0.1773**		**1,754.3143**	**1,754.3143**	**0.0894**	**0.2630**	**1,834.9300**

Del Amo Circle Apt_Construction Mitigation - 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					3.0366	0.0000	3.0366	1.4654	0.0000	1.4654			0.0000			0.0000
Off-Road	1.3330	14.4676	8.7038	0.0206		0.6044	0.6044		0.5560	0.5560	0.0000	1,995.6147	1,995.6147	0.6454		2,011.7503
Total	**1.3330**	**14.4676**	**8.7038**	**0.0206**	**3.0366**	**0.6044**	**3.6409**	**1.4654**	**0.5560**	**2.0214**	**0.0000**	**1,995.6147**	**1,995.6147**	**0.6454**		**2,011.7503**

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	0.0460	3.0897	0.8007	0.0133	0.3700	0.0187	0.3887	0.1022	0.0179	0.1201		1,458.9586	1,458.9586	0.0802	0.2317	1,530.0050
Vendor	0.0111	0.4019	0.1534	1.8600e-003	0.0600	1.9400e-003	0.0619	0.0174	1.8600e-003	0.0193		200.6203	200.6203	6.6800e-003	0.0289	209.3911
Worker	0.0344	0.0246	0.3322	9.4000e-004	0.1030	6.7000e-004	0.1037	0.0275	6.2000e-004	0.0281		94.7354	94.7354	2.5600e-003	2.4700e-003	95.5339
Total	**0.0915**	**3.5162**	**1.2863**	**0.0161**	**0.5330**	**0.0213**	**0.5543**	**0.1472**	**0.0204**	**0.1675**		**1,754.3143**	**1,754.3143**	**0.0894**	**0.2630**	**1,834.9300**

Del Amo Circle Apt_Construction Mitigation - 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

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	1.7136	13.6239	14.2145	0.0250		0.6136	0.6136		0.5880	0.5880		2,289.5233	2,289.5233	0.4330		2,300.3479
Total	**1.7136**	**13.6239**	**14.2145**	**0.0250**		**0.6136**	**0.6136**		**0.5880**	**0.5880**		**2,289.5233**	**2,289.5233**	**0.4330**		**2,300.3479**

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		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0600	2.1701	0.8282	0.0101	0.3459	0.0105	0.3564	0.0996	0.0100	0.1096		1,083.3496	1,083.3496	0.0361	0.1559	1,130.7120
Worker	0.7840	0.5619	7.5738	0.0214	2.5485	0.0153	2.5638	0.6759	0.0141	0.6900		2,159.9662	2,159.9662	0.0583	0.0562	2,178.1730
Total	**0.8440**	**2.7320**	**8.4020**	**0.0314**	**2.8944**	**0.0258**	**2.9202**	**0.7755**	**0.0241**	**0.7996**		**3,243.3159**	**3,243.3159**	**0.0944**	**0.2121**	**3,308.8849**

Del Amo Circle Apt_Construction Mitigation - 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	1.7136	13.6239	14.2145	0.0250		0.6136	0.6136		0.5880	0.5880	0.0000	2,289.5233	2,289.5233	0.4330		2,300.3479
Total	**1.7136**	**13.6239**	**14.2145**	**0.0250**		**0.6136**	**0.6136**		**0.5880**	**0.5880**	**0.0000**	**2,289.5233**	**2,289.5233**	**0.4330**		**2,300.3479**

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		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0600	2.1701	0.8282	0.0101	0.3237	0.0105	0.3342	0.0942	0.0100	0.1042		1,083.3496	1,083.3496	0.0361	0.1559	1,130.7120
Worker	0.7840	0.5619	7.5738	0.0214	2.3491	0.0153	2.3644	0.6269	0.0141	0.6410		2,159.9662	2,159.9662	0.0583	0.0562	2,178.1730
Total	**0.8440**	**2.7320**	**8.4020**	**0.0314**	**2.6728**	**0.0258**	**2.6986**	**0.7211**	**0.0241**	**0.7452**		**3,243.3159**	**3,243.3159**	**0.0944**	**0.2121**	**3,308.8849**

Del Amo Circle Apt_Construction Mitigation - 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

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	1.5971	12.8235	14.1002	0.0250		0.5381	0.5381		0.5153	0.5153		2,289.6541	2,289.6541	0.4265		2,300.3154
Total	**1.5971**	**12.8235**	**14.1002**	**0.0250**		**0.5381**	**0.5381**		**0.5153**	**0.5153**		**2,289.6541**	**2,289.6541**	**0.4265**		**2,300.3154**

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		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0580	2.1745	0.8108	9.9100e-003	0.3459	0.0106	0.3565	0.0996	0.0101	0.1097		1,067.1174	1,067.1174	0.0362	0.1537	1,113.8323
Worker	0.7328	0.5014	7.0441	0.0208	2.5485	0.0147	2.5632	0.6759	0.0135	0.6894		2,098.9443	2,098.9443	0.0528	0.0523	2,115.8352
Total	**0.7909**	**2.6759**	**7.8549**	**0.0307**	**2.8944**	**0.0252**	**2.9196**	**0.7755**	**0.0236**	**0.7991**		**3,166.0617**	**3,166.0617**	**0.0890**	**0.2060**	**3,229.6674**

Del Amo Circle Apt_Construction Mitigation - 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	1.5971	12.8235	14.1002	0.0250		0.5381	0.5381		0.5153	0.5153	0.0000	2,289.6541	2,289.6541	0.4265		2,300.3154
Total	**1.5971**	**12.8235**	**14.1002**	**0.0250**		**0.5381**	**0.5381**		**0.5153**	**0.5153**	**0.0000**	**2,289.6541**	**2,289.6541**	**0.4265**		**2,300.3154**

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		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0580	2.1745	0.8108	9.9100e-003	0.3237	0.0106	0.3343	0.0942	0.0101	0.1043		1,067.1174	1,067.1174	0.0362	0.1537	1,113.8323
Worker	0.7328	0.5014	7.0441	0.0208	2.3491	0.0147	2.3638	0.6269	0.0135	0.6404		2,098.9443	2,098.9443	0.0528	0.0523	2,115.8352
Total	**0.7909**	**2.6759**	**7.8549**	**0.0307**	**2.6728**	**0.0252**	**2.6981**	**0.7211**	**0.0236**	**0.7447**		**3,166.0617**	**3,166.0617**	**0.0890**	**0.2060**	**3,229.6674**

Del Amo Circle Apt_Construction Mitigation - 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

3.5 Building Construction - 2025

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	1.4897	12.0233	14.0072	0.0250		0.4700	0.4700		0.4498	0.4498		2,289.8898	2,289.8898	0.4200		2,300.3887
Total	**1.4897**	**12.0233**	**14.0072**	**0.0250**		**0.4700**	**0.4700**		**0.4498**	**0.4498**		**2,289.8898**	**2,289.8898**	**0.4200**		**2,300.3887**

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		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0563	2.1644	0.7961	9.7200e-003	0.3459	0.0106	0.3565	0.0996	0.0101	0.1097		1,047.9374	1,047.9374	0.0365	0.1511	1,093.8647
Worker	0.6873	0.4501	6.5563	0.0201	2.5485	0.0140	2.5625	0.6759	0.0129	0.6887		2,027.6919	2,027.6919	0.0477	0.0488	2,043.4229
Total	**0.7436**	**2.6145**	**7.3524**	**0.0298**	**2.8944**	**0.0246**	**2.9190**	**0.7755**	**0.0230**	**0.7985**		**3,075.6293**	**3,075.6293**	**0.0841**	**0.1999**	**3,137.2876**

Del Amo Circle Apt_Construction Mitigation - 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	1.4897	12.0233	14.0072	0.0250		0.4700	0.4700		0.4498	0.4498	0.0000	2,289.8898	2,289.8898	0.4200		2,300.3887
Total	**1.4897**	**12.0233**	**14.0072**	**0.0250**		**0.4700**	**0.4700**		**0.4498**	**0.4498**	**0.0000**	**2,289.8898**	**2,289.8898**	**0.4200**		**2,300.3887**

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		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0563	2.1644	0.7961	9.7200e-003	0.3237	0.0106	0.3343	0.0942	0.0101	0.1043		1,047.9374	1,047.9374	0.0365	0.1511	1,093.8647
Worker	0.6873	0.4501	6.5563	0.0201	2.3491	0.0140	2.3631	0.6269	0.0129	0.6398		2,027.6919	2,027.6919	0.0477	0.0488	2,043.4229
Total	**0.7436**	**2.6145**	**7.3524**	**0.0298**	**2.6728**	**0.0246**	**2.6974**	**0.7211**	**0.0230**	**0.7441**		**3,075.6293**	**3,075.6293**	**0.0841**	**0.1999**	**3,137.2876**

Del Amo Circle Apt_Construction Mitigation - 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

3.6 Paving - 2025

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	0.7854	7.4371	11.6737	0.0179		0.3503	0.3503		0.3234	0.3234		1,710.0067	1,710.0067	0.5420		1,723.5556
Paving	0.0561					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.8416**	**7.4371**	**11.6737**	**0.0179**		**0.3503**	**0.3503**		**0.3234**	**0.3234**		**1,710.0067**	**1,710.0067**	**0.5420**		**1,723.5556**

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		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0452	0.0296	0.4313	1.3200e-003	0.1677	9.2000e-004	0.1686	0.0445	8.5000e-004	0.0453		133.4008	133.4008	3.1400e-003	3.2100e-003	134.4357
Total	**0.0452**	**0.0296**	**0.4313**	**1.3200e-003**	**0.1677**	**9.2000e-004**	**0.1686**	**0.0445**	**8.5000e-004**	**0.0453**		**133.4008**	**133.4008**	**3.1400e-003**	**3.2100e-003**	**134.4357**

Del Amo Circle Apt_Construction Mitigation - 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	0.7854	7.4371	11.6737	0.0179		0.3503	0.3503		0.3234	0.3234	0.0000	1,710.0067	1,710.0067	0.5420		1,723.5556
Paving	0.0561					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.8416**	**7.4371**	**11.6737**	**0.0179**		**0.3503**	**0.3503**		**0.3234**	**0.3234**	**0.0000**	**1,710.0067**	**1,710.0067**	**0.5420**		**1,723.5556**

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		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0452	0.0296	0.4313	1.3200e-003	0.1546	9.2000e-004	0.1555	0.0413	8.5000e-004	0.0421		133.4008	133.4008	3.1400e-003	3.2100e-003	134.4357
Total	**0.0452**	**0.0296**	**0.4313**	**1.3200e-003**	**0.1546**	**9.2000e-004**	**0.1555**	**0.0413**	**8.5000e-004**	**0.0421**		**133.4008**	**133.4008**	**3.1400e-003**	**3.2100e-003**	**134.4357**

Del Amo Circle Apt_Construction Mitigation - 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

3.7 Architectural Coating - 2025

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	69.2594					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
Total	**69.4303**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**		**281.4481**	**281.4481**	**0.0154**		**281.8319**

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		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1387	0.0908	1.3228	4.0500e-003	0.5142	2.8200e-003	0.5170	0.1364	2.5900e-003	0.1390		409.0957	409.0957	9.6200e-003	9.8400e-003	412.2695
Total	**0.1387**	**0.0908**	**1.3228**	**4.0500e-003**	**0.5142**	**2.8200e-003**	**0.5170**	**0.1364**	**2.5900e-003**	**0.1390**		**409.0957**	**409.0957**	**9.6200e-003**	**9.8400e-003**	**412.2695**

Del Amo Circle Apt_Construction Mitigation - 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					
Archit. Coating	69.2594					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515	0.0000	281.4481	281.4481	0.0154		281.8319
Total	**69.4303**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**	**0.0000**	**281.4481**	**281.4481**	**0.0154**		**281.8319**

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		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1387	0.0908	1.3228	4.0500e-003	0.4739	2.8200e-003	0.4768	0.1265	2.5900e-003	0.1291		409.0957	409.0957	9.6200e-003	9.8400e-003	412.2695
Total	**0.1387**	**0.0908**	**1.3228**	**4.0500e-003**	**0.4739**	**2.8200e-003**	**0.4768**	**0.1265**	**2.5900e-003**	**0.1291**		**409.0957**	**409.0957**	**9.6200e-003**	**9.8400e-003**	**412.2695**

Del Amo Circle Apt_Construction Mitigation - 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

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	lb/day										lb/day					
Mitigated	2.6279	2.8728	26.4579	0.0583	6.5761	0.0430	6.6192	1.7518	0.0400	1.7917		5,951.6712	5,951.6712	0.4147	0.2585	6,039.0774
Unmitigated	2.6279	2.8728	26.4579	0.0583	6.5761	0.0430	6.6192	1.7518	0.0400	1.7917		5,951.6712	5,951.6712	0.4147	0.2585	6,039.0774

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	908.00	914.00	754.00	3,030,526	3,030,526
Enclosed Parking with Elevator	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	908.00	914.00	754.00	3,030,526	3,030,526

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	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
Enclosed Parking with Elevator	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
Other Asphalt Surfaces	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
Other Non-Asphalt Surfaces	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

Del Amo Circle Apt_Construction Mitigation - 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

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	lb/day										lb/day					
NaturalGas Mitigated	0.0659	0.5630	0.2396	3.5900e-003		0.0455	0.0455		0.0455	0.0455		718.7507	718.7507	0.0138	0.0132	723.0219
NaturalGas Unmitigated	0.0659	0.5630	0.2396	3.5900e-003		0.0455	0.0455		0.0455	0.0455		718.7507	718.7507	0.0138	0.0132	723.0219

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	lb/day										lb/day					
Apartments Mid Rise	6109.38	0.0659	0.5630	0.2396	3.5900e-003		0.0455	0.0455		0.0455	0.0455		718.7507	718.7507	0.0138	0.0132	723.0219
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0659**	**0.5630**	**0.2396**	**3.5900e-003**		**0.0455**	**0.0455**		**0.0455**	**0.0455**		**718.7507**	**718.7507**	**0.0138**	**0.0132**	**723.0219**

Del Amo Circle Apt_Construction Mitigation - 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

	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	lb/day										lb/day					
Apartments Mid Rise	6.10938	0.0659	0.5630	0.2396	3.5900e-003		0.0455	0.0455		0.0455	0.0455		718.7507	718.7507	0.0138	0.0132	723.0219
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0659**	**0.5630**	**0.2396**	**3.5900e-003**		**0.0455**	**0.0455**		**0.0455**	**0.0455**		**718.7507**	**718.7507**	**0.0138**	**0.0132**	**723.0219**

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	6.1959	0.2235	16.5493	1.0900e-003		0.0943	0.0943		0.0943	0.0943	0.0000	72.1721	72.1721	0.0296	7.8000e-004	73.1421
Unmitigated	6.1959	0.2235	16.5493	1.0900e-003		0.0943	0.0943		0.0943	0.0943	0.0000	72.1721	72.1721	0.0296	7.8000e-004	73.1421

Del Amo Circle Apt_Construction Mitigation - 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

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	0.8584					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.8340					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	3.8800e-003	0.0332	0.0141	2.1000e-004		2.6800e-003	2.6800e-003		2.6800e-003	2.6800e-003	0.0000	42.3529	42.3529	8.1000e-004	7.8000e-004	42.6046
Landscaping	0.4996	0.1903	16.5352	8.8000e-004		0.0917	0.0917		0.0917	0.0917		29.8191	29.8191	0.0287		30.5375
Total	**6.1959**	**0.2235**	**16.5493**	**1.0900e-003**		**0.0943**	**0.0943**		**0.0943**	**0.0943**	**0.0000**	**72.1721**	**72.1721**	**0.0295**	**7.8000e-004**	**73.1421**

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	0.8584					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.8340					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	3.8800e-003	0.0332	0.0141	2.1000e-004		2.6800e-003	2.6800e-003		2.6800e-003	2.6800e-003	0.0000	42.3529	42.3529	8.1000e-004	7.8000e-004	42.6046
Landscaping	0.4996	0.1903	16.5352	8.8000e-004		0.0917	0.0917		0.0917	0.0917		29.8191	29.8191	0.0287		30.5375
Total	**6.1959**	**0.2235**	**16.5493**	**1.0900e-003**		**0.0943**	**0.0943**		**0.0943**	**0.0943**	**0.0000**	**72.1721**	**72.1721**	**0.0295**	**7.8000e-004**	**73.1421**

Del Amo Circle Apt_Construction Mitigation - 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

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Del Amo Circle Apt_Construction Mitigation

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

Los Angeles-South Coast County, Mitigation Report

Construction Mitigation Summary

Phase	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Demolition	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grading	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

OFFROAD Equipment Mitigation

Equipment Type	Fuel Type	Tier	Number Mitigated	Total Number of Equipment	DPF	Oxidation Catalyst
Air Compressors	Diesel	No Change	0	1	No Change	0.00
Cement and Mortar Mixers	Diesel	No Change	0	1	No Change	0.00
Concrete/Industrial Saws	Diesel	No Change	0	1	No Change	0.00
Cranes	Diesel	No Change	0	1	No Change	0.00
Forklifts	Diesel	No Change	0	2	No Change	0.00
Graders	Diesel	No Change	0	2	No Change	0.00
Pavers	Diesel	No Change	0	1	No Change	0.00
Rollers	Diesel	No Change	0	2	No Change	0.00
Rubber Tired Dozers	Diesel	No Change	0	2	No Change	0.00
Tractors/Loaders/Backhoes	Diesel	No Change	0	8	No Change	0.00
Generator Sets	Diesel	No Change	0	1	No Change	0.00
Paving Equipment	Diesel	No Change	0	1	No Change	0.00
Scrapers	Diesel	No Change	0	1	No Change	0.00
Welders	Diesel	No Change	0	3	No Change	0.00

Del Amo Circle Apt_Construction Mitigation

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

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	Unmitigated tons/yr						Unmitigated mt/yr					
Air Compressors	1.96000E-003	1.31700E-002	2.08100E-002	3.00000E-005	5.90000E-004	5.90000E-004	0.00000E+000	2.93624E+000	2.93624E+000	1.60000E-004	0.00000E+000	2.94025E+000
Cement and Mortar Mixers	6.20000E-004	3.87000E-003	3.24000E-003	1.00000E-005	1.50000E-004	1.50000E-004	0.00000E+000	4.81190E-001	4.81190E-001	5.00000E-005	0.00000E+000	4.82440E-001
Concrete/Industrial Saws	3.00000E-003	2.32600E-002	3.29200E-002	6.00000E-005	1.15000E-003	1.15000E-003	0.00000E+000	4.83892E+000	4.83892E+000	2.40000E-004	0.00000E+000	4.84488E+000
Cranes	8.33200E-002	8.64660E-001	4.52880E-001	1.49000E-003	3.63200E-002	3.34100E-002	0.00000E+000	1.30540E+002	1.30540E+002	4.22200E-002	0.00000E+000	1.31595E+002
Forklifts	4.10400E-002	3.85600E-001	5.12310E-001	6.90000E-004	2.16000E-002	1.98700E-002	0.00000E+000	6.05150E+001	6.05150E+001	1.95700E-002	0.00000E+000	6.10043E+001
Generator Sets	7.13400E-002	6.38760E-001	9.42970E-001	1.69000E-003	2.68200E-002	2.68200E-002	0.00000E+000	1.45541E+002	1.45541E+002	5.67000E-003	0.00000E+000	1.45683E+002
Graders	1.28500E-002	1.55880E-001	5.67000E-002	2.20000E-004	5.05000E-003	4.65000E-003	0.00000E+000	1.94760E+001	1.94760E+001	6.30000E-003	0.00000E+000	1.96335E+001
Pavers	1.82000E-003	1.66200E-002	3.04100E-002	5.00000E-005	7.80000E-004	7.20000E-004	0.00000E+000	4.33401E+000	4.33401E+000	1.40000E-003	0.00000E+000	4.36905E+000
Paving Equipment	1.54000E-003	1.32800E-002	2.67400E-002	4.00000E-005	6.60000E-004	6.00000E-004	0.00000E+000	3.75605E+000	3.75605E+000	1.21000E-003	0.00000E+000	3.78642E+000
Rollers	2.88000E-003	3.03000E-002	3.87800E-002	6.00000E-005	1.52000E-003	1.40000E-003	0.00000E+000	4.84010E+000	4.84010E+000	1.57000E-003	0.00000E+000	4.87924E+000
Rubber Tired Dozers	2.63600E-002	2.74400E-001	1.19590E-001	3.30000E-004	1.23600E-002	1.13700E-002	0.00000E+000	2.88843E+001	2.88843E+001	9.34000E-003	0.00000E+000	2.91179E+001
Scrapers	3.15000E-003	3.31300E-002	2.45500E-002	6.00000E-005	1.30000E-003	1.20000E-003	0.00000E+000	5.33471E+000	5.33471E+000	1.73000E-003	0.00000E+000	5.37785E+000
Tractors/Loaders/Backhoes	4.06000E-002	4.10220E-001	6.37850E-001	8.90000E-004	1.85800E-002	1.70900E-002	0.00000E+000	7.82374E+001	7.82374E+001	2.53000E-002	0.00000E+000	7.88700E+001
Welders	1.76870E-001	1.05371E+000	1.28122E+000	1.97000E-003	3.44900E-002	3.44900E-002	0.00000E+000	1.45400E+002	1.45400E+002	1.44000E-002	0.00000E+000	1.45760E+002

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	Mitigated tons/yr						Mitigated mt/yr					
Air Compressors	1.96000E-003	1.31700E-002	2.08100E-002	3.00000E-005	5.90000E-004	5.90000E-004	0.00000E+000	2.93624E+000	2.93624E+000	1.60000E-004	0.00000E+000	2.94024E+000
Cement and Mortar Mixers	6.20000E-004	3.87000E-003	3.24000E-003	1.00000E-005	1.50000E-004	1.50000E-004	0.00000E+000	4.81190E-001	4.81190E-001	5.00000E-005	0.00000E+000	4.82440E-001
Concrete/Industrial Saws	3.00000E-003	2.32600E-002	3.29200E-002	6.00000E-005	1.15000E-003	1.15000E-003	0.00000E+000	4.83891E+000	4.83891E+000	2.40000E-004	0.00000E+000	4.84487E+000
Cranes	8.33200E-002	8.64660E-001	4.52880E-001	1.49000E-003	3.63200E-002	3.34100E-002	0.00000E+000	1.30539E+002	1.30539E+002	4.22200E-002	0.00000E+000	1.31595E+002
Forklifts	4.10400E-002	3.85600E-001	5.12310E-001	6.90000E-004	2.16000E-002	1.98700E-002	0.00000E+000	6.05150E+001	6.05150E+001	1.95700E-002	0.00000E+000	6.10042E+001
Generator Sets	7.13400E-002	6.38760E-001	9.42970E-001	1.69000E-003	2.68200E-002	2.68200E-002	0.00000E+000	1.45541E+002	1.45541E+002	5.67000E-003	0.00000E+000	1.45682E+002
Graders	1.28500E-002	1.55880E-001	5.67000E-002	2.20000E-004	5.05000E-003	4.65000E-003	0.00000E+000	1.94760E+001	1.94760E+001	6.30000E-003	0.00000E+000	1.96335E+001
Pavers	1.82000E-003	1.66200E-002	3.04100E-002	5.00000E-005	7.80000E-004	7.20000E-004	0.00000E+000	4.33401E+000	4.33401E+000	1.40000E-003	0.00000E+000	4.36905E+000
Paving Equipment	1.54000E-003	1.32800E-002	2.67400E-002	4.00000E-005	6.60000E-004	6.00000E-004	0.00000E+000	3.75604E+000	3.75604E+000	1.21000E-003	0.00000E+000	3.78641E+000
Rollers	2.88000E-003	3.03000E-002	3.87800E-002	6.00000E-005	1.52000E-003	1.40000E-003	0.00000E+000	4.84010E+000	4.84010E+000	1.57000E-003	0.00000E+000	4.87923E+000

Del Amo Circle Apt_Construction Mitigation

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

Rubber Tired Dozers	2.63600E-002	2.74390E-001	1.19590E-001	3.30000E-004	1.23600E-002	1.13700E-002	0.00000E+000	2.88843E+001	2.88843E+001	9.34000E-003	0.00000E+000	2.91178E+001
Scrapers	3.15000E-003	3.31300E-002	2.45500E-002	6.00000E-005	1.30000E-003	1.20000E-003	0.00000E+000	5.33471E+000	5.33471E+000	1.73000E-003	0.00000E+000	5.37784E+000
Tractors/Loaders/Backhoes	4.06000E-002	4.10220E-001	6.37850E-001	8.90000E-004	1.85800E-002	1.70900E-002	0.00000E+000	7.82373E+001	7.82373E+001	2.53000E-002	0.00000E+000	7.88699E+001
Welders	1.76870E-001	1.05371E+000	1.28122E+000	1.97000E-003	3.44900E-002	3.44900E-002	0.00000E+000	1.45400E+002	1.45400E+002	1.44000E-002	0.00000E+000	1.45760E+002

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Air Compressors	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	3.40107E-006
Cement and Mortar Mixers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Concrete/Industrial Saws	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	2.06658E-006	2.06658E-006	0.00000E+000	0.00000E+000	2.06403E-006
Cranes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.22568E-006	1.22568E-006	0.00000E+000	0.00000E+000	1.13986E-006
Forklifts	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.15674E-006	1.15674E-006	0.00000E+000	0.00000E+000	1.31138E-006
Generator Sets	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.16806E-006	1.16806E-006	0.00000E+000	0.00000E+000	1.16692E-006
Graders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.02690E-006	1.02690E-006	0.00000E+000	0.00000E+000	1.01867E-006
Pavers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Paving Equipment	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	2.66237E-006	2.66237E-006	0.00000E+000	0.00000E+000	2.64102E-006
Rollers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	2.04950E-006
Rubber Tired Dozers	0.00000E+000	3.64431E-005	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.03863E-006	1.03863E-006	0.00000E+000	0.00000E+000	1.37373E-006
Scrapers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.85948E-006
Tractors/Loaders/Backhoes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.27816E-006	1.27816E-006	0.00000E+000	0.00000E+000	1.26791E-006
Welders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.23796E-006	1.23796E-006	0.00000E+000	0.00000E+000	1.16630E-006

Fugitive Dust Mitigation

Yes/No	Mitigation Measure	Mitigation Input		Mitigation Input		Mitigation Input	
No	Soil Stabilizer for unpaved Roads	PM10 Reduction	0.00	PM2.5 Reduction	0.00		
Yes	Replace Ground Cover of Area Disturbed	PM10 Reduction	5.00	PM2.5 Reduction	5.00		

Del Amo Circle Apt_Construction Mitigation

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

Yes	Water Exposed Area	PM10 Reduction	55.00	PM2.5 Reduction	55.00	Frequency (per day)	2.00
No	Unpaved Road Mitigation	Moisture Content %	0.00	Vehicle Speed (mph)	15.00		
Yes	Clean Paved Road	% PM Reduction	9.00				

		Unmitigated		Mitigated		Percent Reduction	
Phase	Source	PM10	PM2.5	PM10	PM2.5	PM10	PM2.5
Architectural Coating	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Architectural Coating	Roads	0.01	0.00	0.01	0.00	0.08	0.07
Building Construction	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	Roads	0.73	0.20	0.68	0.18	0.08	0.07
Demolition	Fugitive Dust	0.03	0.01	0.01	0.00	0.57	0.57
Demolition	Roads	0.00	0.00	0.00	0.00	0.07	0.07
Grading	Fugitive Dust	0.21	0.10	0.09	0.04	0.57	0.57
Grading	Roads	0.02	0.00	0.02	0.00	0.07	0.06
Paving	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Paving	Roads	0.00	0.00	0.00	0.00	0.08	0.07
Site Preparation	Fugitive Dust	0.01	0.00	0.00	0.00	0.57	0.57
Site Preparation	Roads	0.00	0.00	0.00	0.00	0.06	0.03

Operational Percent Reduction Summary

Category	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Natural Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Del Amo Circle Apt_Construction Mitigation

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

Water Indoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water Outdoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Operational Mobile Mitigation

Project Setting:

Mitigation	Category	Measure	% Reduction	Input Value 1	Input Value 2	Input Value 3
No	Land Use	Increase Density	0.00			
No	Land Use	Increase Diversity	0.10	0.31		
No	Land Use	Improve Walkability Design	0.00			
No	Land Use	Improve Destination Accessibility	0.00			
No	Land Use	Increase Transit Accessibility	0.25			
No	Land Use	Integrate Below Market Rate Housing	0.00			
	Land Use	Land Use SubTotal	0.00			
No	Neighborhood Enhancements	Improve Pedestrian Network				
No	Neighborhood Enhancements	Provide Traffic Calming Measures				
No	Neighborhood Enhancements	Implement NEV Network	0.00			
	Neighborhood Enhancements	Neighborhood Enhancements Subtotal	0.00			
No	Parking Policy Pricing	Limit Parking Supply	0.00			
No	Parking Policy Pricing	Unbundle Parking Costs	0.00			
No	Parking Policy Pricing	On-street Market Pricing	0.00			
	Parking Policy Pricing	Parking Policy Pricing Subtotal	0.00			
No	Transit Improvements	Provide BRT System	0.00			
No	Transit Improvements	Expand Transit Network	0.00			
No	Transit Improvements	Increase Transit Frequency	0.00			
	Transit Improvements	Transit Improvements Subtotal	0.00			
		Land Use and Site Enhancement Subtotal	0.00			
No	Commute	Implement Trip Reduction Program				
No	Commute	Transit Subsidy				

Del Amo Circle Apt_Construction Mitigation

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

No	Commute	Implement Employee Parking "Cash Out"				
No	Commute	Workplace Parking Charge				
No	Commute	Encourage Telecommuting and Alternative Work Schedules	0.00			
No	Commute	Market Commute Trip Reduction Option	0.00			
No	Commute	Employee Vanpool/Shuttle	0.00		2.00	
No	Commute	Provide Ride Sharing Program				
	Commute	Commute Subtotal	0.00			
No	School Trip	Implement School Bus Program	0.00			
		Total VMT Reduction	0.00			

Area Mitigation

Measure Implemented	Mitigation Measure	Input Value
No	Only Natural Gas Hearth	
No	No Hearth	
No	Use Low VOC Cleaning Supplies	
No	Use Low VOC Paint (Residential Interior)	50.00
No	Use Low VOC Paint (Residential Exterior)	50.00
No	Use Low VOC Paint (Non-residential Interior)	100.00
No	Use Low VOC Paint (Non-residential Exterior)	100.00
No	Use Low VOC Paint (Parking)	100.00
No	% Electric Lawnmower	0.00
No	% Electric Leafblower	0.00
No	% Electric Chainsaw	0.00

Energy Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Exceed Title 24		
No	Install High Efficiency Lighting		
No	On-site Renewable		

Del Amo Circle Apt_Construction Mitigation

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

Appliance Type	Land Use Subtype	% Improvement
ClothWasher		30.00
DishWasher		15.00
Fan		50.00
Refrigerator		15.00

Water Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Apply Water Conservation on Strategy	0.00	0.00
No	Use Reclaimed Water	0.00	0.00
No	Use Grey Water	0.00	
No	Install low-flow bathroom faucet	32.00	
No	Install low-flow Kitchen faucet	18.00	
No	Install low-flow Toilet	20.00	
No	Install low-flow Shower	20.00	
No	Turf Reduction	0.00	
No	Use Water Efficient Irrigation Systems	6.10	
No	Water Efficient Landscape	0.00	0.00

Solid Waste Mitigation

Mitigation Measures	Input Value
Institute Recycling and Composting Services	
Percent Reduction in Waste Disposed	

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Appendix D – Data Sources

LINSCOTT LAW & GREENSPAN engineers

TABLE 1
PROJECT TRAFFIC GENERATION RATES AND FORECAST[1]
DEL AMO CIRCLE APARTMENTS, TORRANCE

Description	Weekday							Saturday				Sunday			
	Daily 2-Way	AM Peak Hour			PM Peak Hour			Daily 2-Way	Midday Peak Hour			Daily 2-Way	Midday Peak Hour		
		Enter	Exit	Total	Enter	Exit	Total		Enter	Exit	Total		Enter	Exit	Total
Proposed Trip Generation Rates:															
▪ ITE 221: Multifamily Housing Mid Rise Not Close to Rail Transit (TE/DU)	4.54	23%	77%	0.37	61%	39%	0.39	4.57	51%	49%	0.39	3.77	55%	45%	0.32
Proposed Trip Generation Forecast:															
▪ Multifamily Housing Mid Rise (200 DU)	908	17	57	74	48	30	78	914	40	38	78	754	35	29	64

[1] Source: *Trip Generation*, 11th Edition, Institute of Transportation Engineers (ITE), Washington, D.C. (2021).

1. METHODOLOGY

1.1 WATER

This report analyzes the potential impacts of the Project on the existing public water infrastructure. As sewer flows and water demands are correlated and similar for indoor water usage, the proposed water demands are based on LACSD sewer generation factors.

1.2 WASTEWATER

This report analyzes the potential impacts of the Project on the existing private and public sewer infrastructure. Anticipated changes in sewer flows will be shared with LACSD to confirm available capacity within sewer pipelines and treatment facilities to which the Project discharges. LACSD sewer generation factors will be utilized to estimate existing and proposed sewer flows.

2. PROJECT IMPACT ANALYSIS

2.1 WATER

2.1.1 Water Consumption

The Project's estimated water demands were based on the LACSD sewer generation factors. Table 1 provides a breakdown of the proposed uses for the development. Landscaping water demands are not known at this time and have been excluded as part of this Due Diligence.

Table 1 Proposed Water Demands

Land Use	Units	Avg. Generation Factor (gpd/unit)[1]	Total Wastewater Generation (gpd)
Commercial/Leasing	2,690 sf	100 gpd/1000 sf	269
Clubhouse	1,932 sf	100 gpd/1000 sf	193
Apartment - Studio	35 D.U.	150 gpd/D.U.	5,250
Apartment – 1 Bdrm	66 D.U.	200 gpd/D.U.	13,200
Apartment – 1 Bdrm+Den	30 D.U.	200 gpd/D.U.	6,000
Apartment – 2 Bdrm	69 D.U.	250 gpd/D.U.	17,250
Total Proposed Water Flow			**42,162**

[1] Based off 100% of the LACSD sewage generation factors.

2.2 WASTEWATER

2.2.1 Sewer Generation

The Project's estimated sewer flows were based on the LACSD sewer generation factors. A breakdown of these wastewater generation calculations for each of the proposed uses of the development are provided below in Table 2.

Table 2 Estimated Proposed Wastewater Generation

Land Use	Units	Avg. Generation Factor (gpd/unit)[1]	Total Wastewater Generation (gpd)
Commercial/Leasing	2,690 sf	100 gpd/1000 sf	269
Clubhouse	1,932 sf	100 gpd/1000 sf	193
Apartment - Studio	35 D.U.	150 gpd/D.U.	5,250
Apartment – 1 Bdrm	66 D.U.	200 gpd/D.U.	13,200
Apartment – 1 Bdrm+Den	30 D.U.	200 gpd/D.U.	6,000
Apartment – 2 Bdrm	69 D.U.	250 gpd/D.U.	17,250
Total Proposed Wastewater Flow			42,162

[1] Based off 100% of the LACSD sewage generation factors.

WATER EFFICIENT LANDSCAPE WORKSHEET

Reference Evapotranspiration (ETo) 39.70 **ETAF for MAWA** 0.55 (Residential)

Hydrozone # /Planting Description[a]	Plant Factor (PF)	Irrigation Method[b]	Irrigation Efficiency (IE)[c]	ETAF (PF/IE)	Landscape Area (sq. ft.)	ETAF x Area	Estimated Total Water Use (ETWU)[d]
Regular Landscape Areas							
Ground Level - Moderate	0.40	drip	0.81	0.49	24,900	12,296	302,661
Rooftop - Moderate	0.40	drip	0.81	0.49	1,200	593	14,586
				Totals	26,100	12,889	317,247
Special Landscape Areas							
moderate plants				1.00			
low water plants				1.00			
				Totals			
						ETWU Total	**317,247**
						Maximum Allowed Water Allowance (MAWA)[e]	**353,334**

[a] ***Hydrozone #/Planting Description***
E.g
1.) front lawn
2.) low water use plantings
3.) medium water use planting

[b] ***Irrigation Method***
overhead spray or drip

[c] ***Irrigation Efficiency***
0.75 for spray head
0.81 for drip

[d] ***ETWU*** **(Annual Gallons Required)**
= *Eto x 0.62 x ETAF x Area*
where 0.62 is a conversion factor that converts acre-inches per acre per year to gallons per square foot per year.

[e] ***MAWA (Annual Gallons Allowed) =*** *(Eto) (0.62) [(ETAF x LA) + ((1-ETAF) x SLA)]*
where 0.62 is a conversion factor that converts acre-inches per acre per year to gallons per square foot per year, LA is the total landscape area in square feet, SLA is the total special landscape area in square feet,
and ETAF is .55 for residential areas and 0.45 for non-residential areas.

ETAF Calculations

Regular Landscape Areas

Total ETAF x Area	12,889
Total Area	26,100
Average ETAF	**0.49**

All Landscape Areas

Total ETAF x Area	12,889
Total Area	26,100
Sitewide ETAF	**0.49**

Average ETAF for Regular Landscape Areas must be 0.55 or below for residential areas, and 0.45 or below for non-residential areas.

Eto data for city of Long Beach / Torrance
from MWELO Appendix A 6/8/2022

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Appendix E – Air Quality and Greenhouse Gas: Regulatory Background

Air Quality and Greenhouse Gas Background and Modeling Data

AIR QUALITY

Climate/Meteorology

SOUTH COAST AIR BASIN

The project site lies in the South Coast Air Basin (SoCAB), which includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties. The SoCAB is in a coastal plain with connecting broad valleys and low hills and is bounded by the Pacific Ocean in the southwest quadrant, with high mountains forming the remainder of the perimeter. The general region lies in the semi-permanent high-pressure zone of the eastern Pacific. As a result, the climate is mild, tempered by cool sea breezes. This usually mild weather pattern is interrupted infrequently by periods of extremely hot weather, winter storms, and Santa Ana winds.[1]

Temperature and Precipitation

The annual average temperature varies little throughout the SoCAB, ranging from the low to middle 60s, measured in degrees Fahrenheit (°F). With a more pronounced oceanic influence, coastal areas show less variability in annual minimum and maximum temperatures than inland areas. The lowest average temperature for the City of Torrance is 57°F in December, and the highest average temperature is 73°F in August.[2] Overall mean average temperature for the City is 64°F.[3]

In contrast to a very steady pattern of temperature, rainfall is seasonally and annually highly variable. Almost all rain falls from November through April. Summer rainfall is normally restricted to widely scattered thundershowers near the coast, with slightly heavier shower activity in the east and over the mountains. Rainfall historically averages 17.01 inches per year in the City. [4]

Humidity

Although the SoCAB has a semiarid climate, the air near the earth's surface is typically moist because of the presence of a shallow marine layer. Except for infrequent periods when dry, continental air is brought into the

[1] South Coast Air Quality Management District (South Coast AQMD). 2005, May. Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning. http://www.aqmd.gov/docs/default-source/planning/air-quality-guidance/complete-guidance-document.pdf.
[2] USA.com. 2022. Torrance, CA Weather. Accessed June 9. http://www.usa.com/irwindale-ca-weather.htm.
[3] USA.com. 2022. Torrance, CA Weather. Accessed June 9. http://www.usa.com/irwindale-ca-weather.htm.
[4] USA.com. 2022. Torrance, CA Weather. Accessed June 9. http://www.usa.com/irwindale-ca-weather.htm.

SoCAB by offshore winds, the "ocean effect" is dominant. Periods of heavy fog, especially along the coast, are frequent. Low clouds, often referred to as high fog, are a characteristic climatic feature. Annual average humidity is 70 percent at the coast and 57 percent in the eastern portions of the SoCAB. [5]

Wind

Wind patterns across the south coastal region are characterized by westerly or southwesterly onshore winds during the day and by easterly or northeasterly breezes at night. Wind speed is somewhat greater during the dry summer months than during the rainy winter season.

Between periods of wind, periods of air stagnation may occur, both in the morning and evening hours. Air stagnation is one of the critical determinants of air quality conditions on any given day. During the winter and fall months, surface high-pressure systems over the SoCAB, combined with other meteorological conditions, can result in very strong, downslope Santa Ana winds. These winds normally continue a few days before predominant meteorological conditions are reestablished.

The mountain ranges to the east affect the transport and diffusion of pollutants by inhibiting their eastward transport. Air quality in the SoCAB generally ranges from fair to poor and is similar to air quality in most of coastal southern California. The entire region experiences heavy concentrations of air pollutants during prolonged periods of stable atmospheric conditions. [6]

Inversions

In conjunction with the two characteristic wind patterns that affect the rate and orientation of horizontal pollutant transport, there are two similarly distinct types of temperature inversions that control the vertical depth through which pollutants are mixed. These are the marine/subsidence inversion and the radiation inversion. The combination of winds and inversions are critical determinants in leading to the highly degraded air quality in summer and the generally good air quality in the winter in the project area. [7]

Air Quality Regulations

The proposed project has the potential to release gaseous emissions of criteria pollutants and dust into the ambient air; therefore, it falls under the ambient air quality standards promulgated at the local, state, and federal levels. The project site is in the SoCAB and is subject to the rules and regulations imposed by the South Coast Air Quality Management District (South Coast AQMD). However, South Coast AQMD reports to California Air Resources board (CARB), and all criteria emissions are also governed by the California and national

[5] South Coast Air Quality Management District (South Coast AQMD). 2005, May. Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning.

[6] South Coast Air Quality Management District (South Coast AQMD). 2005, May. Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning. http://www.aqmd.gov/docs/default-source/planning/air-quality-guidance/complete-guidance-document.pdf.

[7] South Coast Air Quality Management District (South Coast AQMD). 2005, May. Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning. http://www.aqmd.gov/docs/default-source/planning/air-quality-guidance/complete-guidance-document.pdf.

Ambient Air Quality Standards (AAQS). Federal, state, regional, and local laws, regulations, plans, or guidelines that are potentially applicable to the proposed project are summarized below.

AMBIENT AIR QUALITY STANDARDS

The Clean Air Act (CAA) was passed in 1963 by the US Congress and has been amended several times. The 1970 Clean Air Act amendments strengthened previous legislation and laid the foundation for the regulatory scheme of the 1970s and 1980s. In 1977, Congress again added several provisions, including nonattainment requirements for areas not meeting National AAQS and the Prevention of Significant Deterioration program. The 1990 amendments represent the latest in a series of federal efforts to regulate the protection of air quality in the United States. The CAA allows states to adopt more stringent standards or to include other pollution species. The California Clean Air Act (CCAA), signed into law in 1988, requires all areas of the state to achieve and maintain the California AAQS by the earliest practical date. The California AAQS tend to be more restrictive than the National AAQS, based on even greater health and welfare concerns.

These National AAQS and California AAQS are the levels of air quality considered to provide a margin of safety in the protection of the public health and welfare. They are designed to protect "sensitive receptors" most susceptible to further respiratory distress, such as asthmatics, the elderly, very young children, people already weakened by other disease or illness, and persons engaged in strenuous work or exercise. Healthy adults can tolerate occasional exposure to air pollutant concentrations considerably above these minimum standards before adverse effects are observed.

Both California and the federal government have established health-based AAQS for seven air pollutants. As shown in Table 1, these pollutants include ozone (O_3), nitrogen dioxide (NO_2), carbon monoxide (CO), sulfur dioxide (SO_2), coarse inhalable particulate matter (PM_{10}), fine inhalable particulate matter ($PM_{2.5}$), and lead (Pb). In addition, the state has set standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles. These standards are designed to protect the health and welfare of the populace with a reasonable margin of safety.

Table 1 Ambient Air Quality Standards for Criteria Pollutants

Pollutant	Averaging Time	California Standard[1]	Federal Primary Standard[2]	Major Pollutant Sources
Ozone (O_3)[3]	1 hour	0.09 ppm	*	Motor vehicles, paints, coatings, and solvents.
	8 hours	0.070 ppm	0.070 ppm	
Carbon Monoxide (CO)	1 hour	20 ppm	35 ppm	Internal combustion engines, primarily gasoline-powered motor vehicles.
	8 hours	9.0 ppm	9 ppm	
Nitrogen Dioxide (NO_2)	Annual Arithmetic Mean	0.030 ppm	0.053 ppm	Motor vehicles, petroleum-refining operations, industrial sources, aircraft, ships, and railroads.
	1 hour	0.18 ppm	0.100 ppm	
Sulfur Dioxide (SO_2)	Annual Arithmetic Mean	*	0.030 ppm	Fuel combustion, chemical plants, sulfur recovery plants, and metal processing.

Table 1 Ambient Air Quality Standards for Criteria Pollutants

Pollutant	Averaging Time	California Standard[1]	Federal Primary Standard[2]	Major Pollutant Sources
	1 hour	0.25 ppm	0.075 ppm	
	24 hours	0.04 ppm	0.14 ppm	
Respirable Coarse Particulate Matter (PM_{10})	Annual Arithmetic Mean	20 µg/m^3	*	Dust and fume-producing construction, industrial, and agricultural operations, combustion, atmospheric photochemical reactions, and natural activities (e.g., wind-raised dust and ocean sprays).
	24 hours	50 µg/m^3	150 µg/m^3	
Respirable Fine Particulate Matter ($PM_{2.5}$)[4]	Annual Arithmetic Mean	12 µg/m^3	12 µg/m^3	Dust and fume-producing construction, industrial, and agricultural operations, combustion, atmospheric photochemical reactions, and natural activities (e.g., wind-raised dust and ocean sprays).
	24 hours	*	35 µg/m^3	
Lead (Pb)	30-Day Average	1.5 µg/m^3	*	Present source: lead smelters, battery manufacturing & recycling facilities. Past source: combustion of leaded gasoline.
	Calendar Quarter	*	1.5 µg/m^3	
	Rolling 3-Month Average	*	0.15 µg/m^3	
Sulfates (SO_4)[5]	24 hours	25 µg/m^3	*	Industrial processes.
Visibility Reducing Particles	8 hours	ExCo =0.23/km visibility of 10≥ miles	No Federal Standard	Visibility-reducing particles consist of suspended particulate matter, which is a complex mixture of tiny particles that consists of dry solid fragments, solid cores with liquid coatings, and small droplets of liquid. These particles vary greatly in shape, size and chemical composition, and can be made up of many different materials such as metals, soot, soil, dust, and salt.
Hydrogen Sulfide	1 hour	0.03 ppm	No Federal Standard	Hydrogen sulfide (H_2S) is a colorless gas with the odor of rotten eggs. It is formed during bacterial decomposition of sulfur-containing organic substances. Also, it can be present in sewer gas and some natural gas and can be emitted as the result of geothermal energy exploitation.
Vinyl Chloride	24 hours	0.01 ppm	No Federal Standard	Vinyl chloride (chloroethene), a chlorinated hydrocarbon, is a colorless gas with a mild, sweet odor. Most vinyl chloride is used to make polyvinyl chloride (PVC) plastic and vinyl products. Vinyl chloride has been detected near landfills, sewage plants, and hazardous waste sites, due to microbial breakdown of chlorinated solvents.

Table 1 Ambient Air Quality Standards for Criteria Pollutants

Pollutant	Averaging Time	California Standard[1]	Federal Primary Standard[2]	Major Pollutant Sources

Source: California Air Resources Board (CARB). 2016, October 1. Ambient Air Quality Standards. https://ww2.arb.ca.gov/sites/default/files/2020-07/aaqs2.pdf.
Notes: ppm: parts per million; µg/m^3: micrograms per cubic meter
* Standard has not been established for this pollutant/duration by this entity.
1 California standards for O_3, CO (except 8-hour Lake Tahoe), SO_2 (1 and 24 hour), NO_2, and particulate matter (PM_{10}, $PM_{2.5}$, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.
2 National standards (other than O_3, PM, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The O_3 standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM_{10}, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m^3 is equal to or less than one. For $PM_{2.5}$, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard.
3 On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.
4 On December 14, 2012, the national annual $PM_{2.5}$ primary standard was lowered from 15 µg/m^3 to 12.0 µg/m^3. The existing national 24-hour $PM_{2.5}$ standards (primary and secondary) were retained at 35 µg/m^3, as was the annual secondary standard of 15 µg/m^3. The existing 24-hour PM_{10} standards (primary and secondary) of 150 µg/m^3 also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.
5 On June 2, 2010, a new 1-hour SO_2 standard was established and the existing 24-hour and annual primary standards were revoked. The 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.

California has also adopted a host of other regulations that reduce criteria pollutant emissions, including:

- AB 1493: Pavley Fuel Efficiency Standards
- Title 20 California Code of Regulations (CCR): Appliance Energy Efficiency Standards
- Title 24, Part 6, CCR: Building and Energy Efficiency Standards
- Title 24, Part 11, CCR: Green Building Standards Code

CRITERIA AIR POLLUTANTS

The air pollutants emitted into the ambient air by stationary and mobile sources are regulated by federal and state law. Air pollutants are categorized as primary or secondary pollutants. Primary air pollutants are those that are emitted directly from sources and include CO, VOC, NO_2, SO_X, PM_{10}, $PM_{2.5}$, and Pb. Of these, CO, SO_2, NO_2, PM_{10}, and $PM_{2.5}$ are "criteria air pollutants," which means that ambient air quality standards (AAQS) have been established for them. VOC and oxides of nitrogen (NO_x) are air pollutant precursors that form secondary criteria pollutants through chemical and photochemical reactions in the atmosphere. Ozone (O_3) and NO_2 are the principal secondary pollutants. A description of each of the primary and secondary criteria air pollutants and their known health effects is presented below.

Carbon Monoxide (CO) is a colorless, odorless, toxic gas produced by incomplete combustion of carbon substances, such as gasoline or diesel fuel. CO is a primary criteria air pollutant. CO concentrations tend to be the highest during winter mornings with little to no wind, when surface-based inversions trap the pollutant at ground levels. Because CO is emitted directly from internal combustion, engines and motor vehicles operating at slow speeds are the primary source of CO in the SoCAB. The highest ambient CO concentrations are generally found near traffic-congested corridors and intersections. The primary adverse health effect associated with CO is interference with normal oxygen transfer to the blood, which may result in tissue oxygen deprivation.

[8,9] The SoCAB is designated as being in attainment under the California AAQS and attainment (serious maintenance) under the National AAQS.[10]

Volatile Organic Compounds (VOC) are compounds composed primarily of atoms of hydrogen and carbon. Internal combustion associated with motor vehicle usage is the major source of hydrocarbons. Other sources of VOCs include evaporative emissions associated with the use of paints and solvents, the application of asphalt paving, and the use of household consumer products such as aerosols. There are no ambient air quality standards established for VOCs. However, because they contribute to the formation of ozone (O_3), South Coast AQMD has established a significance threshold for this pollutant.[11]

Nitrogen Oxides (NO_x) are a byproduct of fuel combustion and contribute to the formation of O_3, PM_{10}, and $PM_{2.5}$. The two major forms of NO_x are nitric oxide (NO) and nitrogen dioxide (NO_2). The principal form of NO_2 produced by combustion is NO, but NO reacts with oxygen to form NO_2, creating the mixture of NO and NO_2 commonly called NO_x. NO_2 acts as an acute irritant and, in equal concentrations, is more injurious than NO. At atmospheric concentrations, however, NO_2 is only potentially irritating. There is some indication of a relationship between NO_2 and chronic pulmonary fibrosis. Some increase in bronchitis in children (two and three years old) has also been observed at concentrations below 0.3 part per million (ppm). NO_2 absorbs blue light; the result is a brownish-red cast to the atmosphere and reduced visibility. NO is a colorless, odorless gas formed from atmospheric nitrogen and oxygen when combustion takes place under high temperature and/or high pressure.[12,13] The SoCAB is designated as an attainment (maintenance) area under the National AAQS and attainment area under the California AAQS.[14]

Sulfur Dioxide (SO_2) is a colorless, pungent, irritating gas formed by the combustion of sulfurous fossil fuels. It enters the atmosphere as a result of burning high-sulfur-content fuel oils and coal and from chemical processes at chemical plants and refineries. Gasoline and natural gas have very low sulfur content and do not release significant quantities of SO_2.[15,16] When sulfur dioxide forms sulfates (SO_4) in the atmosphere, together

8 South Coast Air Quality Management District (South Coast AQMD). 2005, May. Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning. http://www.aqmd.gov/docs/default-source/planning/air-quality-guidance/complete-guidance-document.pdf.

9 US Environmental Protection Agency (USEPA). 2022. Criteria Air Pollutants. Accessed June 9, 2022. https://www.epa.gov/criteria-air-pollutants.

10 California Air Resources Board (CARB). 2022, Area Designations Maps/State and National. Accessed June 9, 2022. https://ww2.arb.ca.gov/resources/documents/maps-state-and-federal-area-designations.

11 South Coast Air Quality Management District (South Coast AQMD). 2005, May. Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning. http://www.aqmd.gov/docs/default-source/planning/air-quality-guidance/complete-guidance-document.pdf.

12 South Coast Air Quality Management District (South Coast AQMD). 2005, May. Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning. http://www.aqmd.gov/docs/default-source/planning/air-quality-guidance/complete-guidance-document.pdf.

13 US Environmental Protection Agency (USEPA). 2022. Criteria Air Pollutants. Accessed June 9, 2022. https://www.epa.gov/criteria-air-pollutants.

14 California Air Resources Board (CARB). 2022, Area Designations Maps/State and National. Accessed June 9, 2022. https://ww2.arb.ca.gov/resources/documents/maps-state-and-federal-area-designations.

15 South Coast Air Quality Management District (South Coast AQMD). 2005, May. Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning. http://www.aqmd.gov/docs/default-source/planning/air-quality-guidance/complete-guidance-document.pdf.

16 US Environmental Protection Agency (USEPA). 2022. Criteria Air Pollutants. Accessed June 9, 2022. https://www.epa.gov/criteria-air-pollutants.

these pollutants are referred to as sulfur oxides (SO_X). Thus, SO_2 is both a primary and secondary criteria air pollutant. At sufficiently high concentrations, SO_2 may irritate the upper respiratory tract. At lower concentrations and when combined with particulates, SO_2 may do greater harm by injuring lung tissue. The SoCAB is designated as attainment under the California and National AAQS.[17]

Suspended Particulate Matter (PM_{10} and $PM_{2.5}$) consists of finely divided solids or liquids such as soot, dust, aerosols, fumes, and mists. Two forms of fine particulates are now recognized and regulated. Inhalable coarse particles, or PM_{10}, include the particulate matter with an aerodynamic diameter of 10 microns (i.e., 10 millionths of a meter or 0.0004 inch) or less. Inhalable fine particles, or $PM_{2.5}$, have an aerodynamic diameter of 2.5 microns (i.e., 2.5 millionths of a meter or 0.0001 inch) or less. Particulate discharge into the atmosphere results primarily from industrial, agricultural, construction, and transportation activities. However, wind action on arid landscapes also contributes substantially to local particulate loading (i.e., fugitive dust). Both PM_{10} and $PM_{2.5}$ may adversely affect the human respiratory system, especially in people who are naturally sensitive or susceptible to breathing problems.[18]

The US Environmental Protection Agency's (EPA) scientific review concluded that $PM_{2.5}$, which penetrates deeply into the lungs, is more likely than PM_{10} to contribute to health effects and at concentrations that extend well below those allowed by the current PM_{10} standards. These health effects include premature death and increased hospital admissions and emergency room visits (primarily the elderly and individuals with cardiopulmonary disease); increased respiratory symptoms and disease (children and individuals with cardiopulmonary disease such as asthma); decreased lung functions (particularly in children and individuals with asthma); and alterations in lung tissue and structure and in respiratory tract defense mechanisms.[19] There has been emerging evidence that even smaller particulates with an aerodynamic diameter of <0.1 microns or less (i.e., ≤0.1 millionths of a meter or <0.000004 inch), known as ultrafine particulates (UFPs), have human health implications, because UFPs toxic components may initiate or facilitate biological processes that may lead to adverse effects to the heart, lungs, and other organs.[20] However, the EPA or CARB have yet to adopt AAQS to regulate these particulates. Diesel particulate matter (DPM) is classified by the CARB as a carcinogen.[21] Particulate matter can also cause environmental effects such as visibility impairment,[22] environmental damage,[23]

[17] California Air Resources Board (CARB). 2022, Area Designations Maps/State and National. Accessed June 9, 2022. https://ww2.arb.ca.gov/resources/documents/maps-state-and-federal-area-designations.

[18] South Coast Air Quality Management District (South Coast AQMD). 2005, May. Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning. http://www.aqmd.gov/docs/default-source/planning/air-quality-guidance/complete-guidance-document.pdf.

[19] South Coast Air Quality Management District (South Coast AQMD). 2005, May. Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning. http://www.aqmd.gov/docs/default-source/planning/air-quality-guidance/complete-guidance-document.pdf.

[20] South Coast Air Quality Management District (South Coast AQMD). 2013, February. 2012 Final Air Quality Management Plan. http://www.aqmd.gov/home/library/clean-air-plans/air-quality-mgt-plan/final-2012-air-quality-management-plan.

[21] California Air Resources Board (CARB). 1998, April 22. The Report on Diesel Exhaust. http://www.arb.ca.gov/toxics/dieseltac/de-fnds.htm.

[22] $PM_{2.5}$ is the main cause of reduced visibility (haze) in parts of the United States.

[23] Particulate matter can be carried over long distances by wind and then settle on ground or water, making lakes and streams acidic; changing the nutrient balance in coastal waters and large river basins; depleting the nutrients in soil; damaging sensitive forests and farm crops; and affecting the diversity of ecosystems.

and aesthetic damage.[24,25,26] The SoCAB is in nonattainment and serious nonattainment for $PM_{2.5}$ under the California and National AAQS, respectively. For PM_{10}, the SoCAB is nonattainment under the California AAQS and in attainment (serious maintenance) under the National AAQS.[27]

Ozone (O_3) is commonly referred to as "smog" and is a gas that is formed when VOCs and NO_x, both by-products of internal combustion engine exhaust, undergo photochemical reactions in the presence of sunlight. O_3 is a secondary criteria air pollutant. O_3 concentrations are generally highest during the summer months when direct sunlight, light winds, and warm temperatures create favorable conditions for the formation of this pollutant. O_3 poses a health threat to those who already suffer from respiratory diseases as well as to healthy people. Breathing O_3 can trigger a variety of health problems, including chest pain, coughing, throat irritation, and congestion. It can worsen bronchitis, emphysema, and asthma. Ground-level O_3 also can reduce lung function and inflame the linings of the lungs. Repeated exposure may permanently scar lung tissue. O_3 also affects sensitive vegetation and ecosystems, including forests, parks, wildlife refuges, and wilderness areas. In particular, O_3 harms sensitive vegetation during the growing season.[28,29] The SoCAB is designated as extreme nonattainment under the National AAQS (8-hour) and as nonattainment under the California AAQS (1-hour and 8-hour).[30]

Lead (Pb) is a metal found naturally in the environment as well as in manufactured products. Once taken into the body, lead distributes throughout the body in the blood and accumulates in the bones. Depending on the level of exposure, lead can adversely affect the nervous system, kidney function, immune system, reproductive and developmental systems, and the cardiovascular system. Lead exposure also affects the oxygen-carrying capacity of the blood. The effects of lead most commonly encountered in current populations are neurological effects in children and cardiovascular effects in adults (e.g., high blood pressure and heart disease). Infants and young children are especially sensitive to even low levels of lead, which may contribute to behavioral problems, learning deficits, and lowered IQ.[31,32] The major sources of lead emissions have historically been mobile and

[24] Particulate matter can stain and damage stone and other materials, including culturally important objects such as statues and monuments.

[25] South Coast Air Quality Management District (South Coast AQMD). 2005, May. Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning. http://www.aqmd.gov/docs/default-source/planning/air-quality-guidance/complete-guidance-document.pdf.

[26] US Environmental Protection Agency (USEPA). 2022. Criteria Air Pollutants. Accessed June 9, 2022. https://www.epa.gov/criteria-air-pollutants.

[27] CARB approved the South Coast AQMD's request to redesignate the SoCAB from serious nonattainment for PM_{10} to attainment for PM_{10} under the National AAQS on March 25, 2010, because the SoCAB has not violated federal 24-hour PM_{10} standards during the period from 2004 to 2007. In June 2013, the EPA approved the State of California's request to redesignate the PM_{10} nonattainment area to attainment of the PM_{10} National AAQS, effective on July 26, 2013.

[28] South Coast Air Quality Management District (South Coast AQMD). 2005, May. Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning. http://www.aqmd.gov/docs/default-source/planning/air-quality-guidance/complete-guidance-document.pdf.

[29] US Environmental Protection Agency (USEPA). 2022. Criteria Air Pollutants. Accessed June 9, 2022. https://www.epa.gov/criteria-air-pollutants.

[30] California Air Resources Board (CARB). 2021, Area Designations Maps/State and National. Accessed July 29, 2021. https://ww2.arb.ca.gov/resources/documents/maps-state-and-federal-area-designations.

[31] South Coast Air Quality Management District (South Coast AQMD). 2005, May. Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning. http://www.aqmd.gov/docs/default-source/planning/air-quality-guidance/complete-guidance-document.pdf.

[32] US Environmental Protection Agency (USEPA). 2022. Criteria Air Pollutants. Accessed June 9, 2022. https://www.epa.gov/criteria-air-pollutants.

industrial sources. As a result of the EPA's regulatory efforts to remove lead from gasoline, emissions of lead from the transportation sector dramatically declined by 95 percent between 1980 and 1999, and levels of lead in the air decreased by 94 percent between 1980 and 1999. Today, the highest levels of lead in air are usually found near lead smelters. The major sources of lead emissions today are ore and metals processing and piston-engine aircraft operating on leaded aviation gasoline. However, in 2008 the EPA and CARB adopted stricter lead standards, and special monitoring sites immediately downwind of lead sources recorded very localized violations of the new state and federal standards.[33] As a result of these violations, the Los Angeles County portion of the SoCAB is designated nonattainment under the National AAQS for lead.[34] Because emissions of lead are found only in projects that are permitted by South Coast AQMD, lead is not a pollutant of concern for the project.

TOXIC AIR CONTAMINANTS

The public's exposure to air pollutants classified as toxic air contaminants (TACs) is a significant environmental health issue in California. In 1983, the California Legislature enacted a program to identify the health effects of TACs and to reduce exposure to these contaminants to protect the public health. The California Health and Safety Code defines a TAC as "an air pollutant which may cause or contribute to an increase in mortality or in serious illness, or which may pose a present or potential hazard to human health." A substance that is listed as a hazardous air pollutant (HAP) pursuant to Section 112(b) of the federal Clean Air Act (42 United States Code §7412[b]) is a toxic air contaminant. Under state law, the California Environmental Protection Agency (Cal/EPA), acting through CARB, is authorized to identify a substance as a TAC if it determines that the substance is an air pollutant that may cause or contribute to an increase in mortality or to an increase in serious illness, or may pose a present or potential hazard to human health.

California regulates TACs primarily through Assembly Bill (AB) 1807 (Tanner Air Toxics Act) and AB 2588 (Air Toxics "Hot Spot" Information and Assessment Act of 1987). The Tanner Air Toxics Act sets forth a formal procedure for CARB to designate substances as TACs. Once a TAC is identified, CARB adopts an "airborne toxics control measure" for sources that emit designated TACs. If there is a safe threshold for a substance (i.e., a point below which there is no toxic effect), the control measure must reduce exposure to below that threshold. If there is no safe threshold, the measure must incorporate toxics best available control technology to minimize emissions. To date, CARB has established formal control measures for 11 TACs, all of which are identified as having no safe threshold.

Air toxics from stationary sources are also regulated in California under the Air Toxics "Hot Spot" Information and Assessment Act of 1987. Under AB 2588, toxic air contaminant emissions from individual facilities are quantified and prioritized by the air quality management district or air pollution control district. High priority

[33] Source-oriented monitors record concentrations of lead at lead-related industrial facilities in the SoCAB, which include Exide Technologies in the City of Commerce; Quemetco, Inc., in the City of Industry; Trojan Battery Company in Santa Fe Springs; and Exide Technologies in Vernon. Monitoring conducted between 2004 through 2007 showed that the Trojan Battery Company and Exide Technologies exceed the federal standards (South Coast AQMD 2012).

[34] South Coast Air Quality Management District (South Coast AQMD). 2012, May 4. Final 2012 Lead State Implementation Plan: Los Angeles County. http://www3.aqmd.gov/hb/attachments/2011-2015/2012May/2012-May4-030.pdf.

facilities are required to perform a health risk assessment and, if specific thresholds are exceeded, are required to communicate the results to the public in the form of notices and public meetings.

By the December 1999 update to the TAC list, CARB had designated 244 compounds as TACs.[35] Subsequently, the list was updated in 2007 to include Environmental Tobacco Smoke.[36] Additionally, CARB has implemented control measures for a number of compounds that pose high risks and show potential for effective control. The majority of the estimated health risks from TACs can be attributed to relatively few compounds, the most important being particulate matter from diesel-fueled engines.

Diesel Particulate Matter

In 1998, CARB identified particulate emissions from diesel-fueled engines (diesel PM) as a TAC. Previously, the individual chemical compounds in diesel exhaust were considered TACs. Almost all diesel exhaust particle mass is 10 microns or less in diameter. Because of their extremely small size, these particles can be inhaled and eventually trapped in the bronchial and alveolar regions of the lung.

CARB has promulgated the following specific rules to limit TAC emissions:

- 13 CCR Chapter 10, Section 2485, Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling
- 13 CCR Chapter 10, Section 2480, Airborne Toxic Control Measure to Limit School Bus Idling and Idling at Schools
- 13 CCR Section 2477 and Article 8, Airborne Toxic Control Measure for In-Use Diesel-Fueled Transport Refrigeration Units (TRU) and TRU Generator Sets and Facilities Where TRUs Operate

Community Risk

In addition, to reduce exposure to TACs, CARB developed and approved the *Air Quality and Land Use Handbook: A Community Health Perspective* [37] to provide guidance regarding the siting of sensitive land uses in the vicinity of freeways, distribution centers, rail yards, ports, refineries, chrome-plating facilities, dry cleaners, and gasoline-dispensing facilities. This guidance document was developed to assess compatibility and associated health risks when placing sensitive receptors near existing pollution sources. CARB's recommendations on the siting of new sensitive land uses were based on a compilation of recent studies that evaluated data on the adverse health effects from proximity to air pollution sources. The key observation in these studies is that proximity to air pollution sources substantially increases exposure and the potential for adverse health effects. There are three carcinogenic toxic air contaminants that constitute the majority of the known health risks from motor vehicle traffic, DPM from trucks, and benzene and 1,3-butadiene from passenger vehicles. CARB recommendations

[35] California Air Resources Board (CARB). 1999. California Air Resources Board (CARB). Final Staff Report: Update to the Toxic Air Contaminant List. https://ww3.arb.ca.gov/toxics/id/finalstaffreport.htm.
[36] California Air Resources Board (CARB). 2022. CARB Identified Toxic Air Contaminants. Accessed June 9, 2022. https://ww2.arb.ca.gov/resources/documents/carb-identified-toxic-air-contaminants.
[37] California Air Resources Board (CARB). 2005, April. Air Quality and Land Use Handbook: A Community Health Perspective. https://www.arb.ca.gov/ch/handbook.pdf.

are based on data that show that localized air pollution exposures can be reduced by as much as 80 percent by following CARB minimum distance separations.

Multiple Airborne Toxics Exposure Study (MATES)

The Multiple Air Toxics Exposure Study (MATES) is a monitoring and evaluation study on existing ambient concentrations of TACs and the potential health risks from air toxics in the SoCAB. In April 2021, South Coast AQMD released the latest update to the MATES study, MATES V. The first MATES analysis, MATES I, began in 1986 but was limited because of the technology available at the time. Conducted in 1998, MATES II was the first MATES iteration to include a comprehensive monitoring program, an air toxics emissions inventory, and a modeling component. MATES III was conducted in 2004 to 2006, with MATES IV following in 2012 to 2013.

MATES V uses measurements taken during 2018 and 2019, with a comprehensive modeling analysis and emissions inventory based on 2018 data. The previous MATES studies quantified the cancer risks based on the inhalation pathway only. MATES V includes information on the chronic noncancer risks from inhalation and non-inhalation pathways for the first time. Cancer risks and chronic noncancer risks from MATES II through IV measurements have been re-examined using current Office of Environmental Health Hazards Assessment (OEHHA) and CalEPA risk assessment methodologies and modern statistical methods to examine the trends over time.

The MATES V study showed that cancer risk in the SoCAB decreased to 454 in a million from 997 in a million in the MATES IV study. Overall, air toxics cancer risk in the SoCAB decreased by 54 percent since 2012 when MATES IV was conducted. MATES V showed the highest risk locations near the Los Angeles International Airport and the Ports of Long Beach and Los Angeles. Diesel particulate matter continues to be the major contributor to air toxics cancer risk (approximately 72 percent of the total cancer risk). Goods movement and transportation corridors have the highest cancer risk. Transportation sources account for 88 percent of carcinogenic air toxics emissions, and the remainder is from stationary sources, which include large industrial operations such as refineries and power plants as well as smaller businesses such as gas stations and chrome-plating facilities.[38]

Air Quality Management Planning

The South Coast AQMD is the agency responsible for preparing the air quality management plan (AQMP) for the SoCAB in coordination with the Southern California Association of Governments (SCAG). Since 1979, a number of AQMPs have been prepared.

2016 AQMP

On March 3, 2017, the South Coast AQMD adopted the 2016 AQMP as an update to the 2012 AQMP. The 2016 AQMP addresses strategies and measures to attain the following National AAQS:

[38] South Coast Air Quality Management District. 2021, August. Final Report, Multiple Air Toxics Exposure Study V (MATES V). http://www.aqmd.gov/home/air-quality/air-quality-studies/health-studies/mates-v.

- 2008 National 8-hour ozone standard by 2031,
- 2012 National annual $PM_{2.5}$ standard by 2025[39],
- 2006 National 24-hour $PM_{2.5}$ standard by 2019,
- 1997 National 8-hour ozone standard by 2023, and the
  - 1979 National 1-hour ozone standard by year 2022.

It is projected that total NO_X emissions in the SoCAB would need to be reduced to 150 tons per day (tpd) by year 2023 and to 100 tpd in year 2031 to meet the 1997 and 2008 federal 8-hour ozone standards. The strategy to meet the 1997 federal 8-hour ozone standard would also lead to attaining the 1979 federal 1-hour ozone standard by year 2022[40], which requires reducing NO_X emissions in the SoCAB to 250 tpd. This is approximately 45 percent additional reductions above existing regulations for the 2023 ozone standard and 55 percent additional reductions above existing regulations to meet the 2031 ozone standard.

Reducing NO_X emissions would also reduce $PM_{2.5}$ concentrations in the SoCAB. However, as the goal is to meet the 2012 federal annual $PM_{2.5}$ standard no later than year 2025, the South Coast AQMD is seeking to reclassify the SoCAB from "moderate" to "serious" nonattainment under this federal standard. A "moderate" non-attainment would require meeting the 2012 federal standard by no later than 2021.

Overall, the 2016 AQMP is composed of stationary and mobile-source emission reductions from regulatory control measures, incentive-based programs, co-benefits from climate programs, mobile-source strategies, and reductions from federal sources such as aircrafts, locomotives, and ocean-going vessels. Strategies outlined in the 2016 AQMP would be implemented in collaboration between CARB and the EPA. [41]

LEAD STATE IMPLEMENTATION PLAN

In 2008, EPA designated the Los Angeles County portion of the SoCAB nonattainment under the federal lead (Pb) classification due to the addition of source-specific monitoring under the new federal regulation. This designation was based on two source-specific monitors in Vernon and the City of Industry exceeding the new standard. The rest of the SoCAB, outside the Los Angeles County nonattainment area remains in attainment of the new standard. On May 24, 2012, CARB approved the SIP revision for the federal lead standard, which the EPA revised in 2008. Lead concentrations in this nonattainment area have been below the level of the federal standard since December 2011. The SIP revision was submitted to EPA for approval.

AREA DESIGNATIONS

The AQMP provides the framework for air quality basins to achieve attainment of the state and federal ambient air quality standards through the State Implementation Plan (SIP). Areas are classified as attainment or nonattainment areas for particular pollutants, depending on whether they meet ambient air quality standards.

[39] The 2016 AQMP requests a reclassification from moderate to serious non-attainment for the 2012 National $PM_{2.5}$ standard.

[40] South Coast Air Quality Management District (South Coast AQMD). 2017, March 4. Final 2016 Air Quality Management Plan. https://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2016-air-quality-management-plan/final-2016-aqmp/final2016aqmp.pdf?sfvrsn=15.

[41] South Coast Air Quality Management District (South Coast AQMD). 2017, March 4. Final 2016 Air Quality Management Plan. https://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2016-air-quality-management-plan/final-2016-aqmp/final2016aqmp.pdf?sfvrsn=15.

Severity classifications for ozone nonattainment range in magnitude from marginal, moderate, and serious to severe and extreme.

- **Unclassified:** a pollutant is designated unclassified if the data are incomplete and do not support a designation of attainment or nonattainment.
- **Attainment:** a pollutant is in attainment if the CAAQS for that pollutant was not violated at any site in the area during a three-year period.
- **Nonattainment:** a pollutant is in nonattainment if there was at least one violation of a state AAQS for that pollutant in the area.
- **Nonattainment/Transitional:** a subcategory of the nonattainment designation. An area is designated nonattainment/transitional to signify that the area is close to attaining the AAQS for that pollutant.

The attainment status for the SoCAB is shown in Table 2. The SoCAB is designated in attainment of the California AAQS for sulfates. The SoCAB is designated as nonattainment for lead (Los Angeles County only) under the National AAQS.

Table 2 Attainment Status of Criteria Pollutants in the South Coast Air Basin

Pollutant	State	Federal
Ozone – 1-hour	Nonattainment	No Federal Standard
Ozone – 8-hour	Nonattainment	Extreme Nonattainment
PM_{10}	Nonattainment	Attainment (Serious Maintenance)
$PM_{2.5}$	Nonattainment	Serious Nonattainment
CO	Attainment	Attainment
NO_2	Attainment	Attainment (Maintenance)
SO_2	Attainment	Attainment
Lead	Attainment	Nonattainment (Los Angeles County only)[1]
All others	Attainment/Unclassified	Attainment/Unclassified

Source: California Air Resources Board. 2022/ Area Designations Maps/State and National. Accessed on June 09, 2022. https://ww2.arb.ca.gov/resources/documents/maps-state-and-federal-area-designations.

[1] In 2010, the Los Angeles portion of the SoCAB was designated nonattainment for lead under the new federal and existing state AAQS as a result of large industrial emitters. Remaining areas in the SoCAB are unclassified.

Existing Ambient Air Quality

Existing levels of ambient air quality and historical trends and projections in the vicinity of the project site are best documented by measurements taken by the South Coast AQMD. The project site is located within Source Receptor Area (SRA) 3 – Southwest Coast LA County. The air quality monitoring station closest to the project site is the Los Angeles – Westchester Parkway Monitoring Station. However, as this station does not monitor $PM_{2.5}$, data was obtained from the North Long Beach Monitoring Station for this pollutant. Data from these stations are summarized in Table 3, *Ambient Air Quality Monitoring Summary*. The data show that the area

exceeded the state one-hour and the state and federal eight-hour O_3 standards, the state 24-hour PM_{10} standard, and the federal $PM_{2.5}$ standard within the last five recorded years.

Table 3 Ambient Air Quality Monitoring Summary

Pollutant/Standard	Number of Days Threshold Were Exceeded and Maximum Levels during Such Violations				
	2016	2017	2018	2019	2020
Ozone (O_3)[1]					
State 1-Hour ≥ 0.09 ppm (days exceed threshold)	0	0	0	0	1
State 8-hour ≥ 0.07 ppm (days exceed threshold)	3	0	0	0	2
Federal 8-Hour > 0.075 ppm (days exceed threshold)	1	0	0	0	0
Max. 1-Hour Conc. (ppm)	0.087	0.086	0.074	0.082	0.117
Max. 8-Hour Conc. (ppm)	0.080	0.70	0.065	0.067	0.075
Nitrogen Dioxide (NO_2)[1]					
State 1-Hour ≥ 0.18 ppm (days exceed threshold)	0	0	0	0	0
Federal 1-Hour ≥ 0.100 ppm (days exceed threshold)	0	0	0	0	0
Max. 1-Hour Conc. (ppb)	0.0815	0.0722	0.0596	0.0566	0.0597
Coarse Particulates (PM_{10})[1]					
State 24-Hour > 50 µg/m^3 (days exceed threshold)	0	0	0	2	1
Federal 24-Hour > 150 µg/m^3 (days exceed threshold)	0	0	0	0	0
Max. 24-Hour Conc. (µg/m^3)	43.0	46.5	45.3	62.1	55.6
Fine Particulates ($PM_{2.5}$)[2]					
Federal 24-Hour > 35 µg/m^3 (days exceed threshold)	0	4	6	0	4
Max. 24-Hour Conc. (µg/m^3)	29.3	55.3	79.6	28.0	66.0

Source: California Air Resources Board (CARB). 2022. Air Pollution Data Monitoring Cards (2016, 2017, 2018, 2019 and 2020). Accessed on June 10, 2022. https://www.arb.ca.gov/adam/topfour/topfour1.php

Notes: ppm = parts per million; ppb = parts per billion; µg/m^3 = micrograms per cubic meter

[1] Data obtained from the Los Angeles – Westchester Parkway Monitoring Station.

[2] Data obtained from the North Long Beach Monitoring Station.

Sensitive Receptors

Some land uses are considered more sensitive to air pollution than others due to the types of population groups or activities involved. Sensitive population groups include children, the elderly, the acutely ill, and the chronically ill, especially those with cardio-respiratory diseases.

Residential areas are also considered to be sensitive receptors to air pollution because residents (including children and the elderly) tend to be at home for extended periods of time, resulting in sustained exposure to any pollutants present. Schools are also considered sensitive receptors, as children are present for extended durations and engage in regular outdoor activities. Recreational land uses are considered moderately sensitive to air pollution. Although exposure periods are generally short, exercise places a high demand on respiratory functions, which can be impaired by air pollution. In addition, noticeable air pollution can detract from the enjoyment of recreation. Industrial and commercial areas are considered the least sensitive to air pollution. Exposure periods are relatively short and intermittent, as the majority of the workers tend to stay indoors most of the time. In addition, the working population is generally the healthiest segment of the public. The nearest

sensitive receptors to the proposed project site are the single-family residences to the west and southwest of the project site along Ocean Avenue.

GREENHOUSE GAS EMISSIONS

Scientists have concluded that human activities are contributing to global climate change by adding large amounts of heat-trapping gases, known as GHG, to the atmosphere. Climate change is the variation of Earth's climate over time, whether due to natural variability or as a result of human activities. The primary source of these GHG is fossil fuel use. The Intergovernmental Panel on Climate Change (IPCC) has identified four major GHG—water vapor,[42] carbon (CO_2), methane (CH_4), and ozone (O_3)—that are the likely cause of an increase in global average temperatures observed within the 20th and 21st centuries. Other GHG identified by the IPCC that contribute to global warming to a lesser extent include nitrous oxide (N_2O), sulfur hexafluoride (SF_6), hydrofluorocarbons, perfluorocarbons, and chlorofluorocarbons.[43, 44] The major GHGs applicable to the project are briefly described below.

- **Carbon dioxide (CO_2)** enters the atmosphere through the burning of fossil fuels (oil, natural gas, and coal), solid waste, trees and wood products, and respiration, and also as a result of other chemical reactions (e.g. manufacture of cement). Carbon dioxide is removed from the atmosphere (sequestered) when it is absorbed by plants as part of the biological carbon cycle.

- **Methane (CH_4)** is emitted during the production and transport of coal, natural gas, and oil. Methane emissions also result from livestock and other agricultural practices and from the decay of organic waste in municipal landfills and water treatment facilities.

- **Nitrous oxide (N_2O)** is emitted during agricultural and industrial activities as well as during combustion of fossil fuels and solid waste.

GHGs are dependent on the lifetime, or persistence, of the gas molecule in the atmosphere. Some GHGs have stronger greenhouse effects than others. These are referred to as high GWP gases. The GWP of GHG emissions are shown in Table 4, *GHG Emissions and Their Relative Global Warming Potential Compared to CO_2*. The GWP is used to convert GHGs to CO_2-equivalence (CO_2e) to show the relative potential that different GHGs have to retain infrared radiation in the atmosphere and contribute to the greenhouse effect. For example, under

[42] Water vapor (H_2O) is the strongest GHG and the most variable in its phases (vapor, cloud droplets, ice crystals). However, water vapor is not considered a pollutant, but part of the feedback loop rather than a primary cause of change.

[43] Black carbon contributes to climate change both directly, by absorbing sunlight, and indirectly, by depositing on snow (making it melt faster) and by interacting with clouds and affecting cloud formation. Black carbon is the most strongly light-absorbing component of particulate matter (PM) emitted from burning fuels such as coal, diesel, and biomass. Reducing black carbon emissions globally can have immediate economic, climate, and public health benefits. California has been an international leader in reducing emissions of black carbon, with close to 95 percent control expected by 2020 due to existing programs that target reducing PM from diesel engines and burning activities (California Air Resources Board (CARB). 2017, March 14. Final Proposed Short-Lived Climate Pollutant Reduction Strategy. https://www.arb.ca.gov/cc/shortlived/shortlived.htm). However, state and national GHG inventories do not yet include black carbon due to ongoing work resolving the precise global warming potential of black carbon. Guidance for CEQA documents does not yet include black carbon.

[44] Intergovernmental Panel on Climate Change (IPCC). 2001. Third Assessment Report: Climate Change 2001. New York: Cambridge University Press. https://www.ipcc.ch/site/assets/uploads/2018/03/WGI_TAR_full_report.pdf.

the IPCC Fifth Assessment Report (AR5), GWP values for CH_4, 10 MT of CH_4 would be equivalent to 280 MT of CO_2.

Table 4 GHG Emissions and Their Relative Global Warming Potential Compared to CO_2

GHGs	Second Assessment Report Global Warming Potential Relative to CO_2[1]	Fourth Assessment Report Global Warming Potential Relative to CO_2[1]	Fifth Assessment Report Global Warming Potential Relative to CO_2[1]
Carbon Dioxide (CO_2)	1	1	1
Methane (CH_4)[2]	21	25	28
Nitrous Oxide (N_2O)	310	298	265

Source: Intergovernmental Panel on Climate Change (IPCC). 1995. *Second Assessment Report: Climate Change 1995*; Intergovernmental Panel on Climate Change (IPCC). 2007. *Fourth Assessment Report: Climate Change 2007*. New York: Cambridge University Press. Intergovernmental Panel on Climate Change (IPCC). 2013. *Fifth Assessment Report: Climate Change 2013*. New York: Cambridge University Press.

Notes: The IPCC published updated GWP values in its Fifth Assessment Report (AR5) that reflect new information on atmospheric lifetimes of GHGs and an improved calculation of the radiative forcing of CO_2. However, GWP values identified in AR4 are used by South Coast AQMD to maintain consistency in statewide GHG emissions modeling. In addition, the 2017 Scoping Plan Update was based on the GWP values in AR4.

1 Based on 100-year time horizon of the GWP of the air pollutant compared to CO_2.

2 The methane GWP includes direct effects and indirect effects due to the production of tropospheric ozone and stratospheric water vapor. The indirect effect due to the production of CO_2 is not included.

California's Greenhouse Gas Sources and Relative Contribution

In 2021, the statewide GHG emissions inventory was updated for 2000 to 2019 emissions using the GWPs in IPCC's AR4.[45] Based on these GWPs, California produced 418.2 $MMTCO_2e$ GHG emissions in 2019. California's transportation sector was the single largest generator of GHG emissions, producing 39.7 percent of the state's total emissions. Industrial sector emissions made up 21.1 percent, and electric power generation made up 14.1 percent of the state's emissions inventory. Other major sectors of GHG emissions include commercial and residential (10.5 percent), agriculture and forestry (7.6 percent), high GWP (4.9 percent), and recycling and waste (2.1 percent).[46]

Since the peak level in 2004, California's GHG emissions have generally followed a decreasing trend. In 2016, California statewide GHG emissions dropped below the AB 32 target for year 2020 of 431 $MMTCO_2e$ and have remained below this target since then. In 2019, emissions from routine GHG-emitting activities statewide were almost 13 $MMTCO_2e$ lower than the AB 32 target for year 2020. Per capita GHG emissions in California have dropped from a 2001 peak of 14.0 $MTCO_2e$ per person to 10.5 $MTCO_2e$ per person in 2019, a 25 percent decrease.

Transportation emissions continued to decline in 2019 statewide as they had done in 2018, with even more substantial reductions due to a significant increase in renewable diesel. Since 2008, California's electricity sector has followed an overall downward trend in emissions. In 2019, solar power generation continued its rapid growth since 2013. Emissions from high-GWP gases comprised 4.9 percent of California's emissions in 2019. This continues the increasing trend as the gases replace ozone-depleting substances being phased out under the 1987 Montreal Protocol. Overall trends in the inventory also demonstrate that the carbon intensity of

[45] Intergovernmental Panel on Climate Change (IPCC). 2013. Fifth Assessment Report: Climate Change 2013. New York: Cambridge University Press.

[46] California Air Resources Board. 2021, July 28. California Greenhouse Gas 2000-2019 Emissions Trends and Indicators Report. https://ww3.arb.ca.gov/cc/inventory/pubs/reports/2000_2019/ghg_inventory_trends_00-19.pdf.

California's economy (the amount of carbon pollution per million dollars of gross domestic product) has declined 45 percent since the 2001 peak, though the state's gross domestic product grew 63 percent during this period.[47]

Regulatory Settings

REGULATION OF GHG EMISSIONS ON A NATIONAL LEVEL

The EPA announced on December 7, 2009, that GHG emissions threaten the public health and welfare of the American people and that GHG emissions from on-road vehicles contribute to that threat. The EPA's final findings respond to the 2007 U.S. Supreme Court decision that GHG emissions fit within the Clean Air Act definition of air pollutants. The findings do not in and of themselves impose any emission reduction requirements but allow the EPA to finalize the GHG standards proposed in 2009 for new light-duty vehicles as part of the joint rulemaking with the Department of Transportation. [48]

To regulate GHGs from passenger vehicles, EPA was required to issue an endangerment finding. The finding identifies emissions of six key GHGs—CO_2, CH_4, N_2O, hydrofluorocarbons, perfluorocarbons, and SF_6—that have been the subject of scrutiny and intense analysis for decades by scientists in the United States and around the world. The first three are applicable to the project's GHG emissions inventory because they constitute the majority of GHG emissions and, per South Coast AQMD guidance, are the GHG emissions that should be evaluated as part of a project's GHG emissions inventory.

US Mandatory Report Rule for GHGs (2009)

In response to the endangerment finding, the EPA issued the Mandatory Reporting of GHG Rule that requires substantial emitters of GHG emissions (large stationary sources, etc.) to report GHG emissions data. Facilities that emit 25,000 MT or more of CO_2 per year are required to submit an annual report.

Update to Corporate Average Fuel Economy Standards (2021 to 2026)

The federal government issued new Corporate Average Fuel Economy (CAFE) standards in 2012 for model years 2017 to 2025, which required a fleet average of 54.5 miles per gallon in 2025. On March 30, 2020, the EPA finalized an updated CAFE and GHG emissions standards for passenger cars and light trucks and established new standards covering model years 2021 through 2026, known as the Safer Affordable Fuel Efficient (SAFE) Vehicles Final Rule for Model Years 2021 to 2026. However, in response to Executive Order (EO) 13990 by President Biden, the National Highway Traffic Safety Administration announced new proposed fuel standards on August 5, 2021. On December 21, 2021, under the direction of EO 13990, the National Highway Traffic Safety Administration repealed SAFE Vehicles Rule Part One, which had preempted state and local laws related to fuel economy standards. Fuel efficiency under the new standards proposed will increase 8

[47] California Air Resources Board. 2021, July 28. California Greenhouse Gas 2000-2019 Emissions Trends and Indicators Report. https://ww3.arb.ca.gov/cc/inventory/pubs/reports/2000_2019/ghg_inventory_trends_00-19.pdf.

[48] US Environmental Protection Agency (USEPA). 2009, December. EPA: Greenhouse Gases Threaten Public Health and the Environment. Science overwhelmingly shows greenhouse gas concentrations at unprecedented levels due to human activity. https://archive.epa.gov/epapages/newsroom_archive/newsreleases/08d11a451131bca585257685005bf252.html.

percent annually for model years 2024 to 2026 and increase estimate fleetwide average by 12 mpg for model year 2026 compared to model year 2021.[49]

EPA Regulation of Stationary Sources under the Clean Air Act (Ongoing)

Pursuant to its authority under the Clean Air Act, the EPA has been developing regulations for new, large, stationary sources of emissions, such as power plants and refineries. Under former President Obama's 2013 Climate Action Plan, the EPA was directed to develop regulations for existing stationary sources as well. On June 19, 2019, the EPA issued the final Affordable Clean Energy (ACE) rule which became effective on August 19, 2019. The ACE rule was crafted under the direction of President Trump's Energy Independence Executive Order. It officially rescinds the Clean Power Plan rule issued during the Obama Administration and sets emissions guidelines for states in developing plans to limit CO_2 emissions from coal-fired power plants.

REGULATION OF GHG EMISSIONS ON A STATE LEVEL

Current State of California guidance and goals for reductions in GHG emissions are generally embodied in Executive Order S-3-05, Executive Order B-30-15, Assembly Bill 32 (AB 32), Senate Bill 32 (SB 32) and Senate Bill 375 (SB 375).

Executive Order S-3-05

Executive Order S-3-05, signed June 1, 2005. Executive Order S-3-05 set the following GHG reduction targets for the State:

- 2000 levels by 2010
- 1990 levels by 2020
  - 80 percent below 1990 levels by 2050

Assembly Bill 32, the Global Warming Solutions Act (2006)

Current State of California guidance and goals for reductions in GHG emissions are generally embodied in AB 32. AB 32 was passed by the California state legislature on August 31, 2006, to place the state on a course toward reducing its contribution of GHG emissions. AB 32 follows the 2020 tier of emissions reduction targets established in Executive Order S-03-05.

CARB 2008 Scoping Plan

The final Scoping Plan was adopted by CARB on December 11, 2008. The *2008 Scoping Plan* identified that GHG emissions in California are anticipated to be approximately 596 $MMTCO_2e$ in 2020. In December 2007, CARB approved a 2020 emissions limit of 427 $MMTCO_2e$ (471 million tons) for the state.[50] In order to effectively implement the emissions cap, AB 32 directed CARB to establish a mandatory reporting system to

[49] National Highway Traffic Safety Administration (NHTSA). 2021, August 5. USDOT Proposes Improved Fuel Economy Standards for MY 2024-2026 Passenger Cars and Light Trucks. https://www.nhtsa.gov/press-releases/fuel-economy-standards-2024-2026-proposal.

[50] California Air Resources Board (CARB). 2008, October. Climate Change Proposed Scoping Plan, a Framework for Change. https://ww3.arb.ca.gov/cc/scopingplan/document/psp.pdf.

track and monitor GHG emissions levels for large stationary sources that generate more than 25,000 $MTCO_2e$ per year, prepare a plan demonstrating how the 2020 deadline can be met, and develop appropriate regulations and programs to implement the plan by 2012.

First Update to the Scoping Plan

CARB completed a five-year update to the 2008 Scoping Plan, as required by AB 32. The First Update to the Scoping Plan was adopted at the May 22, 2014, board hearing. The update highlights California's progress toward meeting the near-term 2020 GHG emission reduction goals defined in the original 2008 Scoping Plan. As part of the update, CARB recalculated the 1990 GHG emission levels with the updated AR4 GWPs, and the 427 $MMTCO_2e$ 1990 emissions level and 2020 GHG emissions limit, established in response to AB 32, is slightly higher at 431 $MMTCO_2e$. [51]

As identified in the Update to the Scoping Plan, California is on track to meeting the goals of AB 32. However, the update also addresses the state's longer-term GHG goals within a post-2020 element. The post-2020 element provides a high-level view of a long-term strategy for meeting the 2050 GHG goals, including a recommendation for the state to adopt a midterm target. According to the Update to the Scoping Plan, local government reduction targets should chart a reduction trajectory that is consistent with or exceeds the trajectory created by statewide goals. [52] CARB identified that reducing emissions to 80 percent below 1990 levels will require a fundamental shift to efficient, clean energy in every sector of the economy. Progressing toward California's 2050 climate targets will require significant acceleration of GHG reduction rates. Emissions from 2020 to 2050 will have to decline several times faster than the rate needed to reach the 2020 emissions limit. [53]

Executive Order B-30-15

Executive Order B-30-15, signed April 29, 2015, sets a goal of reducing GHG emissions in the state to 40 percent of 1990 levels by year 2030. Executive Order B-30-15 also directs CARB to update the Scoping Plan to quantify the 2030 GHG reduction goal for the state and requires state agencies to implement measures to meet the interim 2030 goal as well as the long-term goal for 2050 in Executive Order S-03-05. It also requires the Natural Resources Agency to conduct triennial updates of the California adaption strategy, Safeguarding California, in order to ensure climate change is accounted for in state planning and investment decisions.

Senate Bill 32 and Assembly Bill 197

In September 2016, Governor Brown signed SB 32 and AB 197 into law, making the Executive Order goal for year 2030 into a statewide mandated legislative target. AB 197 established a joint legislative committee on

[51] California Air Resources Board (CARB). 2014, May 15. First Update to the Climate Change Scoping Plan: Building on the Framework, Pursuant to AB 32, The California Global Warming Solutions Act of 2006. http://www.arb.ca.gov/cc/scopingplan/document/updatedscopingplan2013.htm.

[52] California Air Resources Board (CARB). 2014, May 15. First Update to the Climate Change Scoping Plan: Building on the Framework, Pursuant to AB 32, The California Global Warming Solutions Act of 2006. http://www.arb.ca.gov/cc/scopingplan/document/updatedscopingplan2013.htm.

[53] California Air Resources Board (CARB). 2014, May 15. First Update to the Climate Change Scoping Plan: Building on the Framework, Pursuant to AB 32, The California Global Warming Solutions Act of 2006. http://www.arb.ca.gov/cc/scopingplan/document/updatedscopingplan2013.htm.

climate change policies and requires the CARB to prioritize direction emissions reductions rather than the market-based cap-and-trade program for large stationary, mobile, and other sources.

2017 Climate Change Scoping Plan Update

Executive Order B-30-15 and SB 32 required CARB to prepare another update to the Scoping Plan to address the 2030 target for the state. On December 24, 2017, CARB adopted the 2017 Climate Change Scoping Plan Update, which outlines potential regulations and programs, including strategies consistent with AB 197 requirements, to achieve the 2030 target. The 2017 Scoping Plan establishes a new emissions limit of 260 $MMTCO_2e$ for the year 2030, which corresponds to a 40 percent decrease in 1990 levels by 2030.[54]

California's climate strategy will require contributions from all sectors of the economy, including enhanced focus on zero- and near-zero emission (ZE/NZE) vehicle technologies; continued investment in renewables, such as solar roofs, wind, and other types of distributed generation; greater use of low carbon fuels; integrated land conservation and development strategies; coordinated efforts to reduce emissions of short-lived climate pollutants (methane, black carbon, and fluorinated gases); and an increased focus on integrated land use planning, to support livable, transit-connected communities and conservation of agricultural and other lands. Requirements for GHG reductions at stationary sources complement local air pollution control efforts by the local air districts to tighten criteria air pollutants and TACs emissions limits on a broad spectrum of industrial sources. Major elements of the 2017 Scoping Plan framework include:

- Implementing and/or increasing the standards of the Mobile Source Strategy, which include increasing ZEV buses and trucks;
- Low Carbon Fuel Standard (LCFS), with an increased stringency (18 percent by 2030).
- Implementation of SB 350, which expands the Renewables Portfolio Standard (RPS) to 50 percent RPS and doubles energy efficiency savings by 2030.
- California Sustainable Freight Action Plan, which improves freight system efficiency, utilizes near-zero emissions technology, and deployment of ZEV trucks.
- Implementing the Short-Lived Climate Pollutant Strategy (SLPS), which focuses on reducing methane and hydrofluorocarbon emissions by 40 percent and anthropogenic black carbon emissions by 50 percent by year 2030.
- Post-2020 Cap-and-Trade Program that includes declining caps.
- Continued implementation of SB 375.

[54] California Air Resources Board (CARB). 2017, November. California's 2017 Climate Change Scoping Plan: The Strategy for Achieving California's 2030 Greenhouse Gas Target. https://www.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf.

- Development of a Natural and Working Lands Action Plan to secure California's land base as a net carbon sink.

In addition to the statewide strategies listed above, the 2017 Climate Change Scoping Plan also identified local governments as essential partners in achieving the State's long-term GHG reduction goals and identified local actions to reduce GHG emissions. As part of the recommended actions, CARB recommends statewide targets of no more than 6 $MTCO_2e$ or less per capita by 2030 and 2 $MTCO_2e$ or less per capita by 2050. CARB recommends that local governments evaluate and adopt robust and quantitative locally-appropriate goals that align with the statewide per capita targets and the State's sustainable development objectives and develop plans to achieve the local goals. The statewide per capita goals were developed by applying the percent reductions necessary to reach the 2030 and 2050 climate goals (i.e., 40 percent and 80 percent, respectively) to the State's 1990 emissions limit established under AB 32. For CEQA projects, CARB states that lead agencies have discretion to develop evidenced-based numeric thresholds (mass emissions, per capita, or per service population)—consistent with the Scoping Plan and the state's long-term GHG goals. To the degree a project relies on GHG mitigation measures, CARB recommends that lead agencies prioritize on-site design features that reduce emissions, especially from VMT, and direct investments in GHG reductions within the project's region that contribute potential air quality, health, and economic co-benefits. Where further project design or regional investments are infeasible or not proven to be effective, CARB recommends mitigating potential GHG impacts through purchasing and retiring carbon credits.

The Scoping Plan scenario is set against what is called the business-as-usual (BAU) yardstick—that is, what would the GHG emissions look like if the State did nothing at all beyond the existing policies that are required and already in place to achieve the 2020 limit, as shown in Table 9. It includes the existing renewables requirements, advanced clean cars, the "10 percent" Low Carbon Fuel Standard (LCFS), and the SB 375 program for more vibrant communities, among others. However, it does not include a range of new policies or measures that have been developed or put into statute over the past two years. Also shown in the table, the known commitments are expected to result in emissions that are 60 $MMTCO_2e$ above the target in 2030. If the estimated GHG reductions from the known commitments are not realized due to delays in implementation or technology deployment, the post-2020 Cap-and-Trade Program would deliver the additional GHG reductions in the sectors it covers to ensure the 2030 target is achieved.

Table 9 2017 Climate Change Scoping Plan Emissions Reductions Gap

Modeling Scenario	2030 GHG Emissions $MMTCO_2e$
Reference Scenario (Business-as-Usual)	389
With Known Commitments	320
2030 GHG Target	**260**
Gap to 2030 Target	**60**

Source: California Air Resources Board. 2017, November. California's 2017 Climate Change Scoping Plan: The Strategy for Achieving California's 2030 Greenhouse Gas Target. https://www.arb.ca.gov/cc/scopingplan/2030sp_pp_final.pdf.

Table 10 provides estimated GHG emissions by sector, compared to 1990 levels, and the range of GHG emissions for each sector estimated for 2030.

Table 10 2017 Climate Change Scoping Plan Emissions Change by Sector

Scoping Plan Sector	1990 $MMTCO_2e$	2030 Proposed Plan Ranges $MMTCO_2e$	% Change from 1990
Agricultural	26	24-25	-8% to -4%
Residential and Commercial	44	38-40	-14% to -9%
Electric Power	108	30-53	-72% to -51%
High GWP	3	8-11	267% to 367%
Industrial	98	83-90	-15% to -8%
Recycling and Waste	7	8-9	14% to 29%
Transportation (including TCU)	152	103-111	-32% to -27%
Net Sink[1]	-7	TBD	TBD
Sub Total	431	294-339	-32% to -21%
Cap-and-Trade Program	NA	24-79	NA
Total	**431**	**260**	**-40%**

Source: California Air Resources Board (CARB). 2017, November. California's 2017 Climate Change Scoping Plan: The Strategy for Achieving California's 2030 Greenhouse Gas Target. https://www.arb.ca.gov/cc/scopingplan/2030sp_pp_final.pdf.
Notes: TCU = Transportation, Communications, and Utilities; TBD: To Be Determined.
[1] Work is underway through 2017 to estimate the range of potential sequestration benefits from the natural and working lands sector.

Executive Order B-55-18

Executive Order B-55-18, signed September 10, 2018, sets a goal "to achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net negative emissions thereafter." Executive Order B-55-18 directs CARB to work with relevant state agencies to ensure future Scoping Plans identify and recommend measures to achieve the carbon neutrality goal. The goal of carbon neutrality by 2045 is in addition to other statewide goals, meaning not only should emissions be reduced to 80 percent below 1990 levels by 2050, but that, by no later than 2045, the remaining emissions be offset by equivalent net removals of CO_2e from the atmosphere, including through sequestration in forests, soils, and other natural landscapes.

Draft 2022 Climate Change Scoping Plan Update

CARB released the Draft 2022 Scoping Plan on May 10, 2022. The Scoping Plan was updated to address the carbon neutrality goals of EO B-55-18. Previous Scoping Plans focused on specific GHG reduction targets for our industrial, energy, and transportation sectors—to meet 1990 levels by 2020, and then the more aggressive 40 percent below that for the 2030 target. Carbon neutrality takes it one step further by expanding actions to capture and store carbon including through natural and working lands and mechanical technologies, while drastically reducing anthropogenic sources of carbon pollution at the same time. The measures in the Scoping Plan would achieve 80 percent below 1990 levels by 2050. Final adoption of the 2022 Scoping Plan is anticipated in late fall 2022. CARB's 2022 Scoping Plan identifies strategies that would be most impactful at the local level for ensuring substantial process towards the State's carbon neutrality goals (see Table 11, *Priority Strategies for Local Government Climate Action Plans*).

Table 11 Priority Strategies for Local Government Climate Action Plans

Priority Area	Priority Strategies
Transportation Electrification	Convert local government fleets to zero-emission vehicles (ZEV).
	Create a jurisdiction-specific ZEV ecosystem to support deployment of ZEVs statewide (such as permit streamlining, infrastructure siting, consumer education, or preferential parking policies).
VMT Reduction	Reduce or eliminate minimum parking standards in new developments,
	Adopt and implement Complete Streets policies and investments, consistent with general plan circulation element requirements,
	Increase public access to shared clean mobility options (such as planning for and investing in electric shuttles, bike share, car share, transit).
	Implement parking pricing or transportation demand management pricing strategies.
	Amend zoning or development codes to enable mixed-use, walkable, and compact infill development (such as increasing allowable density of the neighborhood).
	Preserve natural and working lands.
Building Decarbonization	Adopt policies and incentive programs to implement energy efficiency retrofits (such as weatherization, lighting upgrades, replacing energy intensive appliances and equipment with more efficient systems, etc.).
	Adopt policies and incentive programs to electrify all appliances and equipment in existing buildings.
	Adopt policies and incentive programs to reduce electrical loads from equipment plugged into outlets (such as purchasing Energy Star equipment for municipal buildings, occupancy sensors, smart power strips, equipment controllers, etc.).
	Facilitate deployment of renewable energy production and distribution and energy storage.

Source: CARB. 2022, April 20. CARB Draft Scoping Plan: AB32 Source Emissions Initial Modeling Results. https://ww2.arb.ca.gov/sites/default/files/2022-04/SP22-Initial-AQ-Health-Econ-Results-ws-E3.pdf.

For CEQA projects for proposed land use developments, CARB recommends demonstrating that they are aligned with State climate goals based on the attributes of land use development that reduce operational GHG emissions while simultaneously advancing fair housing. Attributes that accommodate growth in a manner consistent with the GHG and equity goals of SB 32 have all the following attributes:

- At least 20 percent of the units are affordable to lower-income residents;
- Result in no net loss of existing affordable units;
- Utilize existing infill sites that are surrounded by urban uses, and reuse or redevelop previously developed, underutilized land presently served by existing utilities and essential public services (e.g., transit, streets, water, sewer);
- Include transit-supportive densities (minimum of 20 residential dwelling units/acre), or are in proximity to existing transit (within ½ mile), or satisfy more detailed and stringent criteria specified in the region's Sustainable Communities Strategy (SCS), for "SCS consistency" that would go further to reduce emissions;
- Do not result in the loss or conversion of the State's natural and working lands;

- Use all electric appliances, without any natural gas connections, and would not use propane or other fossil fuels for space heating, water heating, or indoor cooking;
- Provide EV charging infrastructure at least in accordance with the California Green Building Standards Code (CALGreen) Tier 2 standards; and
- Relax parking requirements by:
- Eliminating parking requirements or including maximum allowable parking ratios.
- Providing residential parking supply at a ratio of <1 parking space per unit;
- Unbundling residential parking costs from costs to rent or lease.[55]

The second approach to project-level alignment with State climate goals is net zero GHG emissions. The third approach to demonstrating project-level alignment with State climate goals is to align with GHG thresholds of significance, which many local air quality management (AQMDs) and air pollution control districts (APCDs) have developed or adopted.[56]

Senate Bill 1383

On September 19, 2016, the Governor signed SB 1383 to supplement the GHG reduction strategies in the Scoping Plan to consider short-lived climate pollutants, including black carbon and CH_4. Black carbon is the light-absorbing component of fine particulate matter produced during incomplete combustion of fuels. SB 1383 requires the state board, no later than January 1, 2018, to approve and begin implementing that comprehensive strategy to reduce emissions of short-lived climate pollutants to achieve a reduction in methane by 40 percent, hydrofluorocarbon gases by 40 percent, and anthropogenic black carbon by 50 percent below 2013 levels by 2030, as specified. The bill also establishes targets for reducing organic waste in landfill. On March 14, 2017, CARB adopted the "Final Proposed Short-Lived Climate Pollutant Reduction Strategy," which identifies the state's approach to reducing anthropogenic and biogenic sources of short-lived climate pollutants. Anthropogenic sources of black carbon include on- and off-road transportation, residential wood burning, fuel combustion (charbroiling), and industrial processes. According to CARB, ambient levels of black carbon in California are 90 percent lower than in the early 1960s despite the tripling of diesel fuel use.[57] In-use on-road rules are expected to reduce black carbon emissions from on-road sources by 80 percent between 2000 and 2020. The South Coast AQMD is one of the air districts that requires air pollution control technologies for

[55] CARB. 2022, April 20. CARB Draft Scoping Plan: AB32 Source Emissions Initial Modeling Results. https://ww2.arb.ca.gov/sites/default/files/2022-04/SP22-Initial-AQ-Health-Econ-Results-ws-E3.pdf.
[56] CARB. 2022, April 20. CARB Draft Scoping Plan: AB32 Source Emissions Initial Modeling Results. https://ww2.arb.ca.gov/sites/default/files/2022-04/SP22-Initial-AQ-Health-Econ-Results-ws-E3.pdf.
[57] California Air Resources Board (CARB). 2017, March 14. Final Proposed Short-Lived Climate Pollutant Reduction Strategy. https://www.arb.ca.gov/cc/shortlived/shortlived.htm.

chain-driven broilers, which reduces particulate emissions from these char broilers by over 80 percent.[58] Additionally, South Coast AQMD Rule 445 limits installation of new fireplaces in the SoCAB.

Senate Bill 375

In 2008, SB 375, the Sustainable Communities and Climate Protection Act, was adopted to connect the GHG emissions reductions targets established in the 2008 Scoping Plan for the transportation sector to local land use decisions that affect travel behavior. Its intent is to reduce GHG emissions from light-duty trucks and automobiles (excludes emissions associated with goods movement) by aligning regional long-range transportation plans, investments, and housing allocations to local land use planning to reduce VMT and vehicle trips. Specifically, SB 375 required CARB to establish GHG emissions reduction targets for each of the 18 metropolitan planning organizations (MPOs). The Southern California Association of Governments (SCAG) is the MPO for the Southern California region, which includes the counties of Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial.

Pursuant to the recommendations of the Regional Transportation Advisory Committee, CARB adopted per capita reduction targets for each of the MPOs rather than a total magnitude reduction target. SCAG's targets are an 8 percent per capita reduction from 2005 GHG emission levels by 2020 and a 13 percent per capita reduction from 2005 GHG emission levels by 2035.[59] The 2020 targets are smaller than the 2035 targets because a significant portion of the built environment in 2020 has been defined by decisions that have already been made. In general, the 2020 scenarios reflect that more time is needed for large land use and transportation infrastructure changes. Most of the reductions in the interim are anticipated to come from improving the efficiency of the region's transportation network. The targets would result in 3 $MMTCO_2e$ of reductions by 2020 and 15 $MMTCO_2e$ of reductions by 2035. Based on these reductions, the passenger vehicle target in CARB's Scoping Plan (for AB 32) would be met.[60]

2017 Update to the SB 375 Targets

CARB is required to update the targets for the MPOs every eight years. In June 2017, CARB released updated targets and technical methodology and recently released another update in February 2018. The updated targets consider the need to further reduce VMT, as identified in the 2017 Scoping Plan Update, while balancing the need for additional and more flexible revenue sources to incentivize positive planning and action toward sustainable communities. Like the 2010 targets, the updated SB 375 targets are in units of percent per capita reduction in GHG emissions from automobiles and light trucks relative to 2005. This excludes reductions anticipated from implementation of state technology and fuels strategies and any potential future state strategies such as statewide road user pricing. The proposed targets call for greater per capita GHG emission reductions from SB 375 than are currently in place, which for 2035, translate into proposed targets that either match or exceed the emission reduction levels in the MPOs' currently adopted SCSs. As proposed, CARB staff's

[58] California Air Resources Board (CARB). 2017, March 14. Final Proposed Short-Lived Climate Pollutant Reduction Strategy. https://www.arb.ca.gov/cc/shortlived/shortlived.htm.

[59] California Air Resources Board (CARB). 2010, September. Staff Report Proposed Regional Greenhouse Gas Emission Reduction Targets for Automobiles and Light Trucks Pursuant to Senate Bill 375. https://ww3.arb.ca.gov/cc/sb375/staffreport_sb375080910.pdf.

[60] California Air Resources Board (CARB). 2010, September. Regional Greenhouse Gas Emission Reduction Targets for Automobiles and Light Trucks Pursuant to Senate Bill 375. https://ww3.arb.ca.gov/board/res/2010/res10-31.pdf.

proposed targets would result in an additional reduction of over 8 $MMTCO_2e$ in 2035 compared to the current targets. For the next round of SCS updates, CARB's updated targets for the SCAG region are an 8 percent per capita GHG reduction in 2020 from 2005 levels (unchanged from the 2010 target) and a 19 percent per capita GHG reduction in 2035 from 2005 levels (compared to the 2010 target of 13 percent).[61] CARB adopted the updated targets and methodology on March 22, 2018. All SCSs adopted after October 1, 2018 are subject to these new targets.

SCAG's Regional Transportation Plan / Sustainable Communities Strategy

SB 375 requires each MPO to prepare a sustainable communities strategy in its regional transportation plan. For the SCAG region, the 2020-2045 Regional Transportation Plan / Sustainable Communities Strategy (RTP/SCS) (Connect SoCal) was adopted on September 3, 2020, and is an update to the 2016-2040 RTP/SCS.[62] In general, the RTP/SCS outlines a development pattern for the region that, when integrated with the transportation network and other transportation measures and policies, would reduce vehicle miles traveled from automobiles and light duty trucks and thereby reduce GHG emissions from these sources.

Connect SoCal focuses on the continued efforts of the previous RTP/SCSs to integrate transportation and land uses strategies in development of the SCAG region through horizon year 2045.[63] Connect SoCal forecasts that the SCAG region will meet its GHG per capita reduction targets of 8 percent by 2020 and 19 percent by 2035. Additionally, Connect SoCal also forecasts that implementation of the plan will reduce VMT per capita in year 2045 by 4.1 percent compared to baseline conditions for that year. Connect SoCal includes a "Core Vision" that centers on maintaining and better managing the transportation network for moving people and goods while expanding mobility choices by locating housing, jobs, and transit closer together, and increasing investments in transit and complete streets.[64]

Assembly Bill 1493

California vehicle GHG emission standards were enacted under AB 1493 (Pavley I). Pavley I is a clean-car standard that reduces GHG emissions from new passenger vehicles (light-duty auto to medium-duty vehicles) from 2009 through 2016 and was anticipated to reduce GHG emissions from new passenger vehicles by 30 percent in 2016. California implements the Pavley I standards through a waiver granted to California by the EPA. In 2012, the EPA issued a Final Rulemaking that sets even more stringent fuel economy and GHG emissions standards for model year 2017 through 2025 light-duty vehicles (see also the discussion on the update to the Corporate Average Fuel Economy standards under Federal Laws, above). In January 2012, CARB approved the Advanced Clean Cars program (formerly known as Pavley II) for model years 2017 through 2025. The

[61] California Air Resources Board (CARB). 2018, February. Proposed Update to the SB 375 Greenhouse Gas Emission Reduction Targets. https://www.arb.ca.gov/cc/inventory/data/data.htm.

[62] Southern California Association of Governments (SCAG). 2020, September 3. Connect SoCal Plan: The 2020-2045 Regional Transportation Plan / Sustainable Communities Strategy of The Southern California Association of Governments. https://www.connectsocal.org/Pages/Connect-SoCal-Final-Plan.aspx

[63] Southern California Association of Governments (SCAG). 2020, September 3. Connect SoCal Plan: The 2020-2045 Regional Transportation Plan / Sustainable Communities Strategy of The Southern California Association of Governments. https://www.connectsocal.org/Pages/Connect-SoCal-Final-Plan.aspx

[64] Southern California Association of Governments (SCAG). 2020, September 3. Connect SoCal Plan: The 2020-2045 Regional Transportation Plan / Sustainable Communities Strategy of The Southern California Association of Governments. https://www.connectsocal.org/Pages/Connect-SoCal-Final-Plan.aspx

program combines the control of smog, soot, and global warming gases and requirements for greater numbers of zero-emission vehicles into a single package of standards. Under California's Advanced Clean Car program, by 2025, new automobiles will emit 34 percent fewer global warming gases and 75 percent fewer smog-forming emissions.

Executive Order S-01-07

On January 18, 2007, the state set a new LCFS for transportation fuels sold in the state. Executive Order S-01-07 sets a declining standard for GHG emissions measured in carbon dioxide equivalent gram per unit of fuel energy sold in California. The LCFS requires a reduction of 2.5 percent in the carbon intensity of California's transportation fuels by 2015 and a reduction of at least 10 percent by 2020. The standard applies to refiners, blenders, producers, and importers of transportation fuels, and would use market-based mechanisms to allow these providers to choose how they reduce emissions during the "fuel cycle" using the most economically feasible methods.

Senate Bills 1078, 107, X1-2, and Executive Order S-14-08

A major component of California's Renewable Energy Program is the RPS established under Senate Bills 1078 (Sher) and 107 (Simitian). Under the RPS, certain retail sellers of electricity were required to increase the amount of renewable energy each year by at least 1 percent in order to reach at least 20 percent by December 30, 2010. Executive Order S-14-08 was signed in November 2008, which expanded the state's Renewable Energy Standard to 33 percent renewable power by 2020. This standard was adopted by the legislature in 2011 (SB X1-2). Renewable sources of electricity include wind, small hydropower, solar, geothermal, biomass, and biogas. The increase in renewable sources for electricity production will decrease indirect GHG emissions from development projects, because electricity production from renewable sources is generally considered carbon neutral.

Senate Bill 350

Senate Bill 350 (de Leon), was signed into law in September 2015. SB 350 establishes tiered increases to the RPS of 40 percent by 2024, 45 percent by 2027, and 50 percent by 2030. SB 350 also set a new goal to double the energy efficiency savings in electricity and natural gas through energy efficiency and conservation measures.

Senate Bill 100

On September 10, 2018, Governor Brown signed SB 100, which raises California's RPS requirements to 60 percent by 2030, with interim targets, and 100 percent by 2045. The bill also establishes a state policy that eligible renewable energy resources and zero-carbon resources supply 100 percent of all retail sales of electricity to California end-use customers and 100 percent of electricity procured to serve all state agencies by December 31, 2045. Under the bill, the state cannot increase carbon emissions elsewhere in the western grid or allow resource shuffling to achieve the 100 percent carbon-free electricity target.

Executive Order B-16-2012

On March 23, 2012, the state identified that CARB, the California Energy Commission (CEC), the Public Utilities Commission, and other relevant agencies worked with the Plug-in Electric Vehicle Collaborative and

the California Fuel Cell Partnership to establish benchmarks to accommodate zero-emissions vehicles in major metropolitan areas, including infrastructure to support them (e.g., electric vehicle charging stations). The executive order also directs the number of zero-emission vehicles in California's state vehicle fleet to increase through the normal course of fleet replacement so that at least 10 percent of fleet purchases of light-duty vehicles are zero-emission by 2015 and at least 25 percent by 2020. The executive order also establishes a target for the transportation sector of reducing GHG emissions from the transportation sector 80 percent below 1990 levels.

Executive Order N-79-20

On September 23, 2020 Governor Newsom signed Executive Order N-79-20 which identifies a goal that 100 percent of in-state sales of new passenger cars and trucks will be zero-emission by 2035. Additionally, this Executive Order identified fleet goals for trucks of 100 percent of drayage trucks be zero emissions by 2035 and 100 percent of medium- and heavy-duty vehicles in the State be zero-emission by 2045, for all operations where feasible. Additionally, the Executive Order identifies a goal for the State to transition to 100 percent zero-emission off-road vehicles and equipment by 2035 where feasible.

California Building Code: Building Energy Efficiency Standards

Energy conservation standards for new residential and non-residential buildings were adopted by the California Energy Resources Conservation and Development Commission (now the CEC) in June 1977 and most recently revised in 2019 (Title 24, Part 6, of the California Code of Regulations [CCR]). Title 24 requires the design of building shells and building components to conserve energy. The standards are updated periodically to allow for consideration and possible incorporation of new energy efficiency technologies and methods. The 2019 Building Energy Efficiency Standards, which were adopted on May 9, 2018, went into effect on January 1, 2020.

The 2019 standards move towards cutting energy use in new homes by more than 50 percent and will require installation of solar photovoltaic systems for single-family homes and multi-family buildings of 3 stories and less. Four key areas the 2019 standards will focus on include 1) smart residential photovoltaic systems; 2) updated thermal envelope standards (preventing heat transfer from the interior to exterior and vice versa); 3) residential and nonresidential ventilation requirements; 4) and nonresidential lighting requirements.[65] Under the 2019 standards, nonresidential buildings will be 30 percent more energy efficient compared to the 2016 standards while single-family homes will be 7 percent more energy efficient.[66] When accounting for the electricity generated by the solar photovoltaic system, single-family homes would use 53 percent less energy compared to homes built to the 2016 standards.[67]

Furthermore, on August 11, 2021, the CEC adopted the 2022 Building Energy Efficiency Standards, which were approved by the California Building Standards Commission in December 2021. The 2022 standards will

[65] California Energy Commission (CEC). 2018. News Release: Energy Commission Adopts Standards Requiring Solar Systems for New Homes, First in Nation. https://www.energy.ca.gov/news/2018-05/energy-commission-adopts-standards-requiring-solar-systems-new-homes-first.

[66] California Energy Commission (CEC). 2018. 2019 Building Energy and Efficiency Standards Frequently Asked Questions. https://www.energy.ca.gov/sites/default/files/2020-03/Title_24_2019_Building_Standards_FAQ_ada.pdf.

[67] California Energy Commission (CEC). 2018. 2019 Building Energy and Efficiency Standards Frequently Asked Questions. https://www.energy.ca.gov/sites/default/files/2020-03/Title_24_2019_Building_Standards_FAQ_ada.pdf.

become effective and replace the existing 2019 standards on January 1, 2023. The 2022 standards require mixed-fuel single-family homes to be electric-ready to accommodate replacement of gas appliances with electric appliances. In addition, the new standards also include prescriptive photovoltaic system and battery requirements for high-rise, multifamily buildings (i.e., more than three stories) and noncommercial buildings such as hotels, offices, medical offices, restaurants, retail stores, schools, warehouses, theaters, and convention centers.[68]

California Building Code: CALGreen

On July 17, 2008, the California Building Standards Commission adopted the nation's first green building standards. The California Green Building Standards Code (24 CCR, Part 11, known as "CALGreen") was adopted as part of the California Building Standards Code. CALGreen established planning and design standards for sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and internal air contaminants.[69] The mandatory provisions of CALGreen became effective January 1, 2011. The CEC adopted the voluntary standards of the 2019 CALGreen on October 3, 2018. The 2019 CALGreen standards become effective January 1, 2020.

2006 Appliance Efficiency Regulations

The 2006 Appliance Efficiency Regulations (20 CCR §§ 1601–1608) were adopted by the CEC on October 11, 2006, and approved by the California Office of Administrative Law on December 14, 2006. The regulations include standards for both federally regulated appliances and non–federally regulated appliances. Though these regulations are now often viewed as "business as usual," they exceed the standards imposed by all other states, and they reduce GHG emissions by reducing energy demand.

Solid Waste Regulations

California's Integrated Waste Management Act of 1989 (AB 939; Public Resources Code §§ 40050 et seq.) set a requirement for cities and counties throughout the state to divert 50 percent of all solid waste from landfills by January 1, 2000, through source reduction, recycling, and composting. In 2008, the requirements were modified to reflect a per capita requirement rather than tonnage. To help achieve this, the act requires that each city and county prepare and submit a source reduction and recycling element. AB 939 also established the goal for all California counties to provide at least 15 years of ongoing landfill capacity.

AB 341 (Chapter 476, Statutes of 2011) increased the statewide goal for waste diversion to 75 percent by 2020 and requires recycling of waste from commercial and multifamily residential land uses. Section 5.408 of the CALGreen also requires that at least 65 percent of the nonhazardous construction and demolition waste from nonresidential construction operations be recycled and/or salvaged for reuse.

The California Solid Waste Reuse and Recycling Access Act (AB 1327; Public Resources Code §§ 42900 et seq.) requires areas to be set aside for collecting and loading recyclable materials in development projects. The act required the California Integrated Waste Management Board to develop a model ordinance for adoption by any

[68] California Energy Commission. 2021, May 19. Amendments to the Building Energy Efficiency Standards (2022 Energy Code) Draft Environmental Report. CEC-400-2021-077-D.

[69] The green building standards became mandatory in the 2010 edition of the code.

local agency requiring adequate areas for collection and loading of recyclable materials as part of development projects. Local agencies are required to adopt the model or an ordinance of their own.

Section 5.408 of the 2019 CALGreen also requires that at least 65 percent of the nonhazardous construction and demolition waste from nonresidential construction operations be recycled and/or salvaged for reuse.

In October of 2014, Governor Brown signed AB 1826, requiring businesses to recycle their organic waste on and after April 1, 2016, depending on the amount of waste they generate per week. This law also requires that on and after January 1, 2016, local jurisdictions across the state implement an organic waste recycling program to divert organic waste generated by businesses, including multifamily residential dwellings that consist of five or more units. Organic waste means food waste, green waste, landscape and pruning waste, nonhazardous wood waste, and food-soiled paper waste that is mixed in with food waste.

Water Efficiency Regulations

The 20x2020 Water Conservation Plan was issued by the Department of Water Resources (DWR) in 2010 pursuant to Senate Bill 7, which was adopted during the 7th Extraordinary Session of 2009–2010 and therefore dubbed "SBX7-7." SBX7-7 mandated urban water conservation and authorized the DWR to prepare a plan implementing urban water conservation requirements (20x2020 Water Conservation Plan). In addition, it required agricultural water providers to prepare agricultural water management plans, measure water deliveries to customers, and implement other efficiency measures. SBX7-7 requires urban water providers to adopt a water conservation target of 20 percent reduction in urban per capita water use by 2020 compared to 2005 baseline use.

The Water Conservation in Landscaping Act of 2006 (AB 1881) requires local agencies to adopt the updated DWR model ordinance or equivalent. AB 1881 also requires the CEC to consult with the DWR to adopt, by regulation, performance standards and labeling requirements for landscape irrigation equipment, including irrigation controllers, moisture sensors, emission devices, and valves to reduce the wasteful, uneconomic, inefficient, or unnecessary consumption of energy or water.

REGULATIONS ON A LOCAL LEVEL

The City of Torrance, in coordination with South Bay Cities Council of Governments (SBCCOG), prepared the City of Torrance Climate Action Plan (City CAP) in order to reduce GHG emissions within the City.[70] The Torrance City Council adopted the City CAP on December 12, 2017. The City has established GHG reduction goals for year 2020 (15 percent below 2005 levels) and for year 2035 (49 percent below 2005 levels). The CAP includes a list of non-binding goals and strategies in the following five categories:[71]

- **Land Use and Transportation:** Facilitate pedestrian and neighborhood development and identify ways to reduce automobile emissions including supporting zero emission vehicle infrastructure, improving

[70] Torrance, City of and South Bay Cities Council of Governments (Torrance and SBCCOG). 2017, December. City of Torrance Climate Action Plan. http://southbaycities.org/sites/default/files/Torrance%20CAP.pdf.
[71] Torrance, City of and South Bay Cities Council of Governments (Torrance and SBCCOG). 2017, December. City of Torrance Climate Action Plan. http://southbaycities.org/sites/default/files/Torrance%20CAP.pdf.

pedestrian and bicycle infrastructure, enhancing public transit service, and supporting reductions in single-occupancy vehicle use.

- **Energy Efficiency:** Emphasize energy efficiency retrofits for existing buildings, energy performance requirements for new construction, water efficient landscaping, financing programs that will allow home and business owners to obtain low-interest loans for implementing energy efficiency in their buildings.
- **Solid Waste:** Focus on increasing waste diversion and encouraging participation in recycling and composting throughout the community.
- **Urban Greening:** Create "carbon sinks" as they store GHG emissions that are otherwise emitted into the atmosphere as well as support health of the community.
- **Energy Generation and Storage:** Demonstrate the City's commitment to support the implementation of clean, renewable energy while decreasing dependence on traditional, GHG emitting power sources.

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