

**ATTACHMENT NO. 8  
TO JULY 13, 2022  
8631 HAYDEN PLACE AGENDA ITEM**

**Attachment C  
Air Quality Technical Report**



# 8631 HAYDEN PLACE PROJECT, CULVER CITY, CA

## Air Quality Technical Report

Prepared for  
Hackman Capital Partners, LLC  
4060 Ince Boulevard  
Culver City, CA 90232

March 2022



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## Air Quality Technical Report

Prepared for  
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4060 Ince Boulevard  
Culver City, CA 90232

March 2022

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# ACRONYMS AND ABBREVIATIONS

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<b>Acronym</b>	<b>Description</b>
Air Basin	South Coast Air Basin
AQMP	Air Quality Management Plan
ATCM	Airborne Toxics Control Measure
BACT	Best Available Control Technology
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CalEEMod	California Emissions Estimator Model
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CCR	California Code of Regulations
CEC	California Energy Commission
CEUS	Commercial End-Use Survey
CEQA	California Environmental Quality Act
City	City of Culver City
CO	Carbon monoxide
DPF	Diesel particulate filters
EMFAC	On-road vehicle emissions factor model
EV	Electric vehicle
GHG	Greenhouse gas
HAP	Hazardous air pollutant
hp	Horsepower
LADOT	Los Angeles Department of Transportation
MATES V	Multiple Air Toxics Exposure Study, April 2021
MPO	Metropolitan Planning Organization
NAAQS	National Ambient Air Quality Standards
NO	Nitric oxide
NO <sub>2</sub>	Nitrogen dioxide
NO <sub>x</sub>	Nitrogen oxides
OFFROAD	Off-road vehicle emissions model

<b>Acronym</b>	<b>Description</b>
OEHHA	Office of Environmental Health Hazard Assessment
Pb	Lead
PDF	Project design feature
PM2.5	Fine particulate matter
PM10	Respirable particulate matter
ppm	Parts per million
RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategy
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SIP	State Implementation Plan
SO <sub>2</sub>	Sulfur dioxide
TAC	Toxic air contaminant
µg/m <sup>3</sup>	Micrograms per cubic meter
USEPA	United States Environmental Protection Agency
VDECS	Verified Diesel Emission Control Strategies
VOC	Volatile organic compounds



# EXECUTIVE SUMMARY

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This Air Quality Technical Report assesses the proposed redevelopment of an approximately 116,607 square foot (2.68-acre) property (Project) located in the Lucerne/Higuera neighborhood of Culver City at 8631 Hayden Place. The Project Site is bounded by Higuera Street to the north, Hayden Place to the south, Nant Studios to the east, and industrial/warehousing uses to the west. The Project Site is currently developed with a two story, approximately 64,480 square foot industrial building fronted by landscaping and a surface parking lot along Hayden Place, with a blank façade and mature trees along Higuera Street. The existing building is currently occupied with two studio uses. The Project Site has an Industrial general plan designation, and is zoned IG (Industrial General), which permits a wide array of uses, including offices and media production uses.

The Project would include the development of a new office building with approximately 244,000 square feet. The building would be U-shaped with an outdoor terrace at the center of the U-shaped building. Parking would be provided in a three-floor, subterranean parking garage. The roof level of the building would include an outdoor terrace at the center of the U-shaped building, with roof mounted mechanical equipment (e.g., air conditioning, heating, exhaust, and ventilation ducts, etc.), and solar ready areas and wired photovoltaic (PV) panels. Development of the Project would require the demolition of a 64,480 square feet two story industrial building landscaping, and paved surface parking lot.

In accordance with the requirements under the California Environmental Quality Act (CEQA), this Air Quality Technical Report (Technical Report) provides an estimate of air quality emissions for the Project and the potential impacts from associated construction and operational activities. More specifically, this Technical Report evaluates the potential for the Project to conflict with an applicable air quality plan, violate an air quality standard or threshold, result in a cumulatively net increase of criteria pollutant emissions, expose sensitive receptors to substantial pollutant concentrations, or create objectionable odors affecting a substantial number of people. The findings of the analyses are summarized as follows:

- The incremental increase in emissions from construction and operation of the Project would not exceed the regional daily emission thresholds set forth by the South Coast Air Quality Management District (SCAQMD). Thus, the Project would not result in a regional violation of applicable air quality standards or jeopardize the timely attainment of such standards in the South Coast Air Basin (the Air Basin).
- The incremental increase in onsite emissions from construction and operation of the Project would not exceed the localized significance thresholds set forth by the SCAQMD. Thus, the Project would not result in a localized violation of applicable air quality standards or expose offsite receptors to substantial levels of regulated air contaminants resulting in a less than significant impact.

- Emissions from the increase in traffic due to operation of the Project would not have a significant impact associated with exceedance of 1-hour or 8-hour local carbon monoxide (CO) concentrations.
- Project construction and operations would not expose off-site receptors to significant levels of toxic air contaminants and health risk impacts would be less than significant.
- Project construction and operations would not result in significant levels of odors.
- The Project would be consistent with air quality policies set forth by the SCAQMD.
- The Project would not result in significant cumulative air quality impacts during its construction and operation.

# SECTION 1

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## Introduction

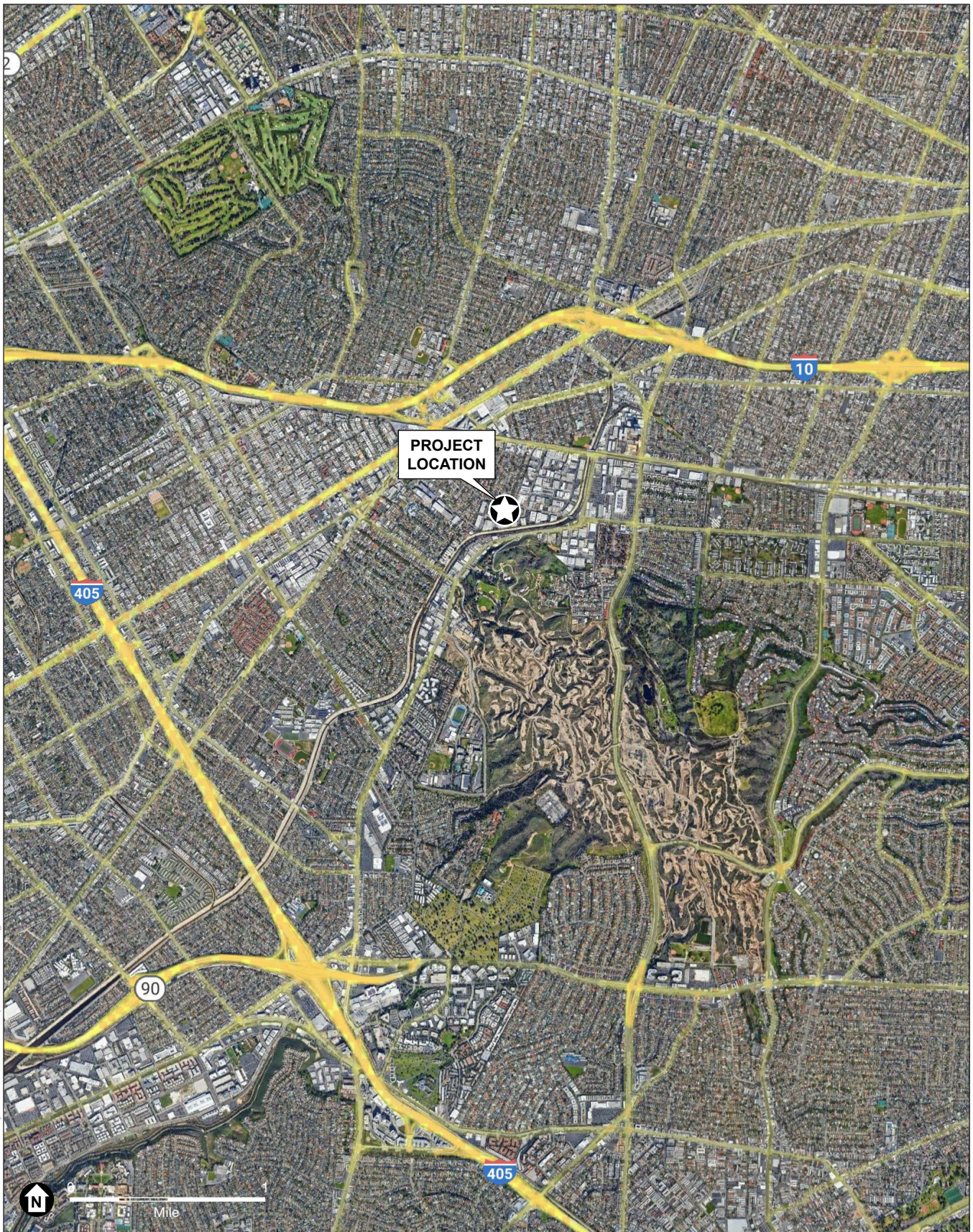
### 1.1 Existing Conditions

The approximately 2.68-acre (approximately 116,607 square feet [sf]) Project Site is located in the Lucerne/Higuera neighborhood in the City of Culver City in a mixed industrial and residential area. The Project Site is shown in **Figure 1**, *Regional Location*. The Project Site is bounded by Higuera Street followed by residential uses to the north, Hayden Place and industrial/warehousing uses to the south, Nant Studios to the east, and industrial/warehousing uses to the west. **Figure 2**, *Aerial Photograph with Surrounding Land Uses*, shows the Project Site and surrounding land uses. The Project Site is currently developed with a two story 64,480 square foot industrial building, landscaping and a surface parking, all of which would be demolished and removed to support development of the Project. The Project Site has an Industrial general plan designation, and is zoned IG (Industrial General), which permits a wide array of uses, including offices and media production uses.

The Project Site is located approximately 0.43 miles southeast of the Los Angeles County Metropolitan Transportation Authority (Metro) “E” Line Station, which provides the Project Site with regional access to Downtown Los Angeles and Santa Monica. In addition, there are multiple regional and local bus lines that run along National and Washington Boulevards. The Project’s Site proximity to the “E” Line Station, which qualifies as a major transit stop, indicates the Project Site is located within a Transit Priority Area (TPA).

### 1.2 Project Description

The Project is proposing to develop a new, approximately 244,000 sf office building up to a maximum of 43 feet in height, over three levels of subterranean parking. The building would be U-shaped, with the eastern portion of the building three-stories in height (i.e., Levels 1 through 3) and the western portion of the building four-stories in height. Level 1 of the office building would include a lobby, accessible from Hayden Place, as well as a potential fitness center and/or commissary that would be available for use by on-site employees and an outdoor terrace located along Higuera Street. Level 1 also includes an exterior public community area along Higuera Street. The remaining areas on level 1, and the upper levels would include office uses with upper level landscaped outdoor terraces for use by employees and visitors to the Project Site. The roof level of the building would include an outdoor terrace at the center of the U-shaped building, with roof mounted mechanical equipment (e.g., air conditioning, heating, exhaust, and ventilation ducts, etc.), and solar ready areas and wired photovoltaic (PV) panels.



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SOURCE: Google Earth Pro, 2021; ESA, 2022

8631 Hayden Place Noise and Vibration Technical Report

**Figure 1**  
Regional Location





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SOURCE: Google Earth Pro, 2021; ESA, 2022

8631 Hayden Place Noise and Vibration Technical Report

**Figure 2**  
Aerial Photograph with Surrounding Land Uses

The Project would maintain the four existing driveways. The entrance to the subterranean parking garage would be provided from the eastern driveways off of Hayden Place and Higuera Street. The loading dock and trash area would also be accessed from the eastern driveway entrance as well, but through a separate driveway. A ride share pick-up/drop-off area would be provided off of Hayden Place in front of the main building entrance.

Vehicle parking spaces would be provided within three subterranean levels with a combined parking area totaling 309,900 gross square feet (gsf). The Project's parking would be valet managed and designed to accommodate vehicles through a combination of standard, compact, tandem, and ADA compliant parking spaces. A total of 750 vehicle parking spaces would be provided, meeting and exceeding the 689 vehicle parking spaces required by code. Of these vehicle parking spaces, 138 vehicle parking spaces would be electric-vehicle capable (EV) parking spaces, as required by CCMC Section 17.320.035.O.3.

### **1.3 Project Land Use Characteristics**

The Project would represent an urban infill development, since it would be undertaken on a currently developed property, and would be located near Metro's Culver City Station and existing public transit bus stops, which would result in potential reduced vehicle trips and VMT compared to model default assumptions. Trip rates provided in the Project traffic study<sup>1</sup> were used in the operational emissions modeling. At Project buildout, hours of operation and periods of peak activity would be similar to those currently existing uses on the Project Site, with A.M. and P.M. peak hours.

### **1.4 Sustainability Features**

The Project will incorporate sustainability features that would reduce operation emissions and target sustainable site development, water savings, energy efficiency, green-oriented materials selection, and improved indoor environmental quality. The Project will incorporate the following operational sustainability features:

- The Project will include a Transportation Demand Management (TDM) Program that includes strategies and action plans that consist of a transportation coordinator, bicycle hub/share, transit subsidies, telecommuting, marking program, carpool/vanpool incentives, and bicycling/walking incentives consistent with the requirements of Culver City's Traffic Code.
- The Project will utilize low pollution vehicles/equipment, construction waste management and indoor air quality management practices including:
  - recycling and/or salvaging at least 75 percent of non-hazardous construction and demolition debris.
  - the use local manufacturers and recycled products where possible
- The Project will use on-site renewable energy generation; energy use reduction strategies include the use of efficient lighting.

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<sup>1</sup> Gibson Transportation Consulting, Inc., Transportation Study for 8631 Hayden Place, 2022.

- The Project will install low flow water fixtures and dual flush toilets.
- The Project will utilize sustainable stormwater management including
  - Installing stormwater filtration and capture systems
  - Use of captured stormwater for irrigation.
- Installation of automatic, weather-based water controllers, high efficiency drip lines and tree bubblers.
  - Use of irrigation zones based on needs of the various drought tolerant plants.
- The Project will install green roofs utilizing low emission materials.
- The Project will install 140 EV capable spaces.
- The Project shall install a solar photovoltaic power system of 1 kilowatt of solar photovoltaics (PV) per 10,000 square feet of the proposed building (equivalent to approximately 24.5 kilowatts of PV power), consistent with City’s requirement.
- The Project shall use high efficiency heating and air conditioning systems
- The Project shall use high efficiency systems for all interior and exterior lighting
- The Project shall provide on-site recycling collection facilities.
- The Project shall provide 23 short-term and 46 long-term bicycle parking spaces.

## 1.5 Existing Site Emissions

As discussed previously, the Project Site is currently developed with a two-story 64,480 square foot filming studio and a paved surface parking lot, all of which would be demolished and removed to support development of the Project. Although, the surface parking lot itself does not generate air pollutant emissions, operation of the building, vehicle trips to and from the Project Site, and maintenance of the landscaped areas generate air pollutant emissions.

Existing emissions are associated with vehicle trips to and from the Project Site, on-site combustion of natural gas for heating, and fugitive emissions of volatile organic compounds (VOCs) from consumer product usage and architectural coatings. Existing emissions were estimated using the California Emissions Estimator Model (CalEEMod), Version 2020.4.0 software, an emissions inventory software program recommended by the SCAQMD. CalEEMod is a Statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant and greenhouse gas (GHG) emissions from a variety of land use projects. CalEEMod was developed in collaboration with the air districts of California. Regional data (e.g., emission factors, trip lengths, meteorology, source inventory, etc.) have been provided by the various California air districts to account for local requirements and conditions. CalEEMod is considered to be an accurate and comprehensive tool for quantifying air quality and GHG emissions impacts from land use projects throughout California.<sup>2</sup>

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<sup>2</sup> See: <http://www.caleemod.com>.

CalEEMod was used to estimate the existing site emissions from vehicle trips, natural gas combustion, consumer products usage, and architectural coatings. Mobile source emissions estimates were calculated outside of CalEEMod and were based on the California Air Resource Boards (CARB) latest on-road vehicle Emissions FACTor (EMFAC) model, EMFAC2021, CalEEMod vehicle miles traveled defaults, and trip rates from the Project's traffic study.<sup>3,4</sup> A detailed discussion of the methodology used to estimate the existing Project Site emissions is provided below. **Table 1, Existing Site Operational Emissions**, identifies the emissions from the site's existing usage and emissions removed due to the Project. The emissions removed from the existing conditions will be counted as credit for the Project.

**TABLE 1**  
**EXISTING SITE OPERATIONAL EMISSIONS (POUNDS PER DAY)<sup>a</sup>**

Source	VOC	NO <sub>x</sub>	CO	SO <sub>2</sub>	PM10	PM2.5
<b>Existing Site Emissions</b>						
Area	1	<1	<1	<1	<1	<1
Energy (Natural Gas)	<1	<1	<1	<1	<1	<1
Mobile Vehicles	<1	<1	6	<1	<1	<1
<b>Total</b>	<b>2</b>	<b>&lt;1</b>	<b>7</b>	<b>&lt;1</b>	<b>&lt;1</b>	<b>&lt;1</b>

<sup>a</sup> Totals may not add up exactly due to rounding in the modeling calculations. Detailed emissions calculations are provided in Exhibit B.

SOURCE: ESA 2022

## 1.6 Existing Air Quality Conditions

### Regional Air Quality

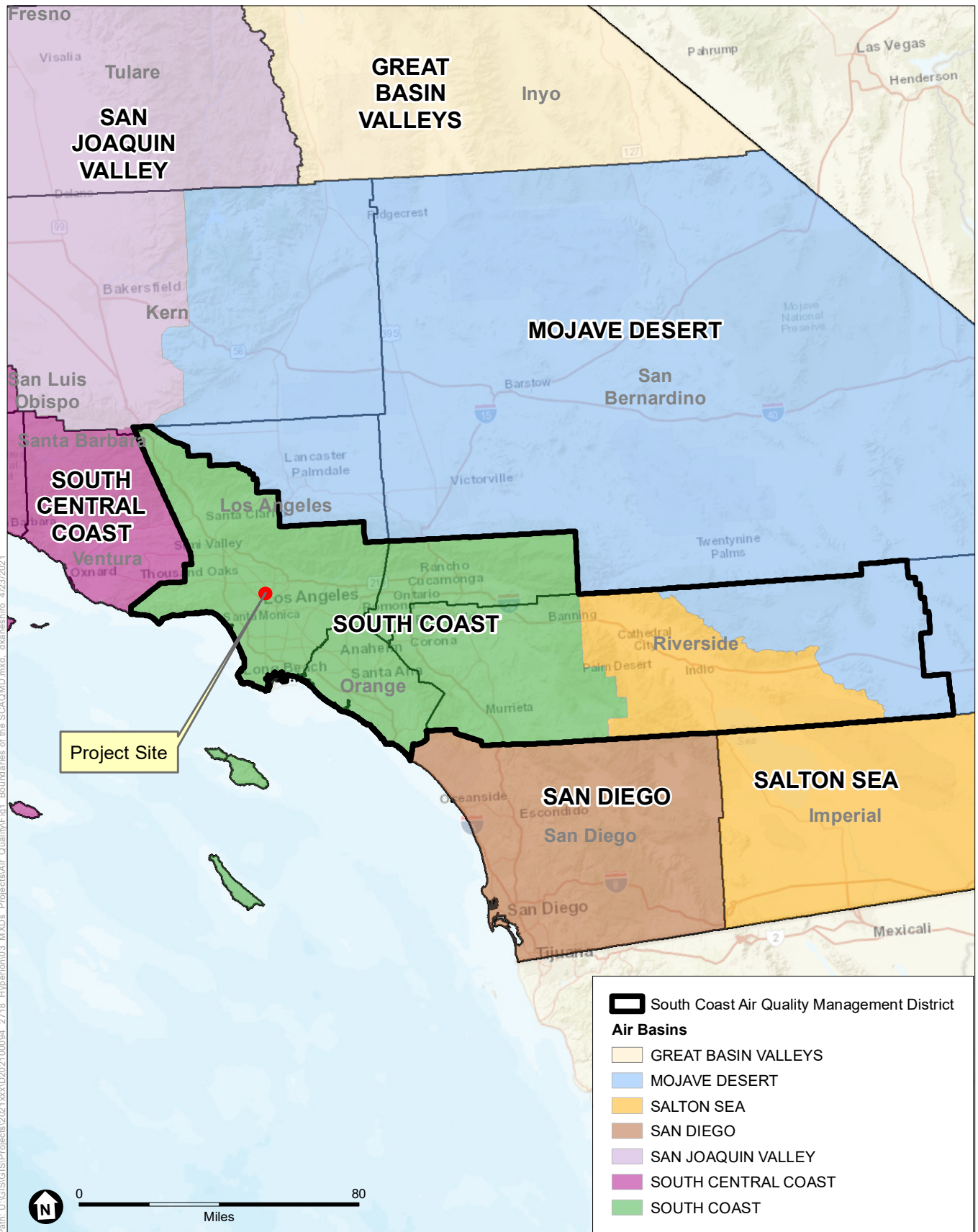
#### Criteria Pollutants

The Project Site is located within the South Coast Air Basin (Air Basin), which is shown in **Figure 3, Boundaries of the South Coast Air Quality Management District**. The Air Basin is an approximately 6,745-square-mile area bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east. The Air Basin

<sup>3</sup> Gibson Transportation Consulting, Inc., Transportation Study for 8631 Hayden Place, 2022.

<sup>4</sup> CalEEMod's default mobile emission factors are based on an internal database which utilizes EMFAC2017. EMFAC2021 is the most up-to-date version of EMFAC provided by CARB. EMFAC2021 emissions factors were generated outside of CalEEMod and mobile emissions were calculated externally based on the Project Traffic Study's total daily vehicle miles traveled.





SOURCE: California Air Resources Board, March 2004

8631 Hayden Place Project

**Figure 3**  
Boundaries of the South Coast Air Quality Management District and Basin



consists of Orange County, Los Angeles County (excluding the Antelope Valley portion), and the western, non-desert portions of San Bernardino and Riverside counties, in addition to the San Gorgonio Pass area in Riverside County. The terrain and geographical location determine the distinctive climate of the Air Basin, as it is a coastal plain with broad valleys and low hills. The Air Basin lies in the semi-permanent high-pressure zone of the eastern Pacific Ocean. The usually mild climatological pattern is interrupted by periods of hot weather, winter storms, or Santa Ana winds.

The extent and severity of pollutant concentrations in the Air Basin is a function of the area's natural physical characteristics (weather and topography) and man-made influences (development patterns and lifestyle). Factors such as wind, sunlight, temperature, humidity, rainfall, and topography all affect the accumulation and dispersion of pollutants throughout the Air Basin, making it an area of high pollution potential. The Air Basin's meteorological conditions, in combination with regional topography, are conducive to the formation and retention of ozone, which is a secondary pollutant that forms through photochemical reactions in the atmosphere. Thus, the greatest air pollution impacts throughout the Air Basin typically occur from June through September. This condition is generally attributed to the emissions occurring in the Air Basin, light winds, and shallow vertical atmospheric mixing. These factors reduce the potential for pollutant dispersion causing elevated air pollutant levels. Pollutant concentrations in the Air Basin vary with location, season, and time of day. Concentrations of ozone, for example, tend to be lower along the coast, higher in the near inland valleys, and lower in the far inland areas of the Air Basin and adjacent desert.

Certain air pollutants have been recognized to cause notable health problems and consequential damage to the environment either directly or in reaction with other pollutants, due to their presence in elevated concentrations in the atmosphere. Such pollutants have been identified and regulated as part of the overall endeavor to prevent further deterioration and facilitate improvement in air quality. The following pollutants are regulated by the USEPA and are subject to emissions control requirements adopted by federal, state and local regulatory agencies. These pollutants are referred to as "criteria air pollutants" as a result of the specific standards, or criteria, which have been adopted for them. A brief description of the health effects of these criteria air pollutants are provided below.

**Ozone (O<sub>3</sub>):** Ozone is a secondary pollutant formed by the chemical reaction of VOCs and nitrogen oxides (NO<sub>x</sub>) in the presence of sunlight under favorable meteorological conditions, such as high temperature and stagnation episodes. Ozone concentrations are generally highest during the summer months when direct sunlight, light wind, and warm temperature conditions are favorable. According to the USEPA, ozone can cause the muscles in the airways to constrict potentially leading to wheezing and shortness of breath.<sup>5</sup> Ozone can make it more difficult to breathe deeply and vigorously; cause shortness of breath and pain when taking a deep breath; cause coughing and sore or scratchy throat; inflame and damage the airways; aggravate lung diseases such as asthma, emphysema and chronic bronchitis; increase the frequency of asthma

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<sup>5</sup> United States Environmental Protection Agency (USEPA), Health Effects of Ozone Pollution, <https://www.epa.gov/ground-level-ozone-pollution/health-effects-ozone-pollution>, last updated October 10, 2018. Accessed January 2022.

attacks; make the lungs more susceptible to infection; continue to damage the lungs even when the symptoms have disappeared; and cause chronic obstructive pulmonary disease.<sup>6</sup> Long-term exposure to ozone is linked to aggravation of asthma, and is likely to be one of many causes of asthma development and long-term exposures to higher concentrations of ozone may also be linked to permanent lung damage, such as abnormal lung development in children.<sup>7</sup> According to the CARB, inhalation of ozone causes inflammation and irritation of the tissues lining human airways, causing and worsening a variety of symptoms and exposure to ozone can reduce the volume of air that the lungs breathe in and cause shortness of breath.<sup>8</sup> The USEPA states that people most at risk from breathing air containing ozone include people with asthma, children, older adults, and people who are active outdoors, especially outdoor workers.<sup>9</sup> Children are at greatest risk from exposure to ozone because their lungs are still developing and they are more likely to be active outdoors when ozone levels are high, which increases their exposure.<sup>10</sup> According to CARB, studies show that children are no more or less likely to suffer harmful effects than adults; however, children and teens may be more susceptible to ozone and other pollutants because they spend nearly twice as much time outdoors and engaged in vigorous activities compared to adults.<sup>11</sup> Children breathe more rapidly than adults and inhale more pollution per pound of their body weight than adults and are less likely than adults to notice their own symptoms and avoid harmful exposures.<sup>12</sup> Further research may be able to better distinguish between health effects in children and adults.<sup>13</sup>

**Volatile Organic Compounds (VOCs):** VOCs are organic chemical compounds of carbon and are not “criteria” pollutants themselves; however, they contribute with NO<sub>x</sub> to form ozone, and are regulated to prevent the formation of ozone.<sup>14</sup> According to CARB, some VOCs are highly reactive and play a critical role in the formation of ozone, other VOCs have adverse health effects, and in some cases, VOCs can be both highly reactive and have adverse health effects.<sup>15</sup> VOCs are typically formed from combustion of fuels and/or released through evaporation of organic liquids, internal combustion associated with motor vehicle usage, and consumer products (e.g., architectural coatings, etc.).<sup>16</sup>

**Nitrogen Dioxide (NO<sub>2</sub>) and Nitrogen Oxides (NO<sub>x</sub>):** NO<sub>x</sub> is a term that refers to a group of compounds containing nitrogen and oxygen. The primary compounds of air quality concern include NO<sub>2</sub> and nitric oxide (NO). Ambient air quality standards have been promulgated for

<sup>6</sup> USEPA, Health Effects of Ozone Pollution.

<sup>7</sup> USEPA, Health Effects of Ozone Pollution.

<sup>8</sup> California Air Resources Board (CARB), Ozone & Health, Health Effects of Ozone, <https://ww2.arb.ca.gov/resources/ozone-and-health>. Accessed January 2022.

<sup>9</sup> USEPA, Health Effects of Ozone Pollution.

<sup>10</sup> USEPA, Health Effects of Ozone Pollution.

<sup>11</sup> CARB, Ozone & Health, Health Effects of Ozone.

<sup>12</sup> CARB, Ozone & Health, Health Effects of Ozone.

<sup>13</sup> CARB, Ozone & Health, Health Effects of Ozone.

<sup>14</sup> USEPA, Technical Overview of Volatile Organic Compounds, <https://www.epa.gov/indoor-air-quality-iaq/technical-overview-volatile-organic-compounds>, last updated April 12, 2017. Accessed January 2022.

<sup>15</sup> CARB, Toxic Air Contaminants Monitoring, Volatile Organic Compounds, <https://www.arb.ca.gov/aaqm/toxics.htm>, last reviewed June 9, 2016. Accessed January 2022.

<sup>16</sup> CARB, Toxic Air Contaminants Monitoring, Volatile Organic Compounds.

NO<sub>2</sub>, which is a reddish-brown, reactive gas.<sup>17</sup> The principle form of NO<sub>x</sub> produced by combustion is NO, but NO reacts quickly in the atmosphere to form NO<sub>2</sub>, creating the mixture of NO and NO<sub>2</sub> referred to as NO<sub>x</sub>.<sup>18</sup> Major sources of NO<sub>x</sub> include emissions from cars, trucks and buses, power plants, and off-road equipment.<sup>19</sup> The terms NO<sub>x</sub> and NO<sub>2</sub> are sometimes used interchangeably. However, the term NO<sub>x</sub> is typically used when discussing emissions, usually from combustion-related activities, and the term NO<sub>2</sub> is typically used when discussing ambient air quality standards. Where NO<sub>x</sub> emissions are discussed in the context of the thresholds of significance or impact analyses, the discussions are based on the conservative assumption that all NO<sub>x</sub> emissions would oxidize in the atmosphere to form NO<sub>2</sub>. According to the USEPA, short-term exposures to NO<sub>2</sub> can potentially aggravate respiratory diseases, particularly asthma, leading to respiratory symptoms (such as coughing, wheezing or difficulty breathing), hospital admissions and visits to emergency rooms while longer exposures to elevated concentrations of NO<sub>2</sub> may contribute to the development of asthma and potentially increase susceptibility to respiratory infections.<sup>20</sup> According to CARB, controlled human exposure studies that show that NO<sub>2</sub> exposure can intensify responses to allergens in allergic asthmatics.<sup>21</sup> In addition, a number of epidemiological studies have demonstrated associations between NO<sub>2</sub> exposure and premature death, cardiopulmonary effects, decreased lung function growth in children, respiratory symptoms, emergency room visits for asthma, and intensified allergic responses.<sup>22</sup> Infants and children are particularly at risk from exposure to NO<sub>2</sub> because they have disproportionately higher exposure to NO<sub>2</sub> than adults due to their greater breathing rate for their body weight and their typically greater outdoor exposure duration while in adults, the greatest risk is to people who have chronic respiratory diseases, such as asthma and chronic obstructive pulmonary disease.<sup>23</sup> CARB states that much of the information on distribution in air, human exposure and dose, and health effects is specifically for NO<sub>2</sub> and there is only limited information for NO and NO<sub>x</sub>, as well as large uncertainty in relating health effects to NO or NO<sub>x</sub> exposure.<sup>24</sup>

**Carbon Monoxide (CO):** CO is primarily emitted from combustion processes and motor vehicles due to the incomplete combustion of fuel, such as natural gas, gasoline, or wood, with the majority of outdoor CO emissions from mobile sources.<sup>25</sup> According to the USEPA, breathing air with a high concentration of CO reduces the amount of oxygen that can be transported in the blood stream to critical organs like the heart and brain and at very high levels, which are possible indoors or in other enclosed environments, CO can cause dizziness, confusion, unconsciousness and death.<sup>26</sup> Very high levels of CO are not likely to occur outdoors; however, when CO levels

<sup>17</sup> CARB, Nitrogen Dioxide & Health, <https://ww2.arb.ca.gov/resources/nitrogen-dioxide-and-health>. Accessed May 2021.

<sup>18</sup> CARB, Nitrogen Dioxide & Health.

<sup>19</sup> USEPA, Nitrogen Dioxide (NO<sub>2</sub>) Pollution, <https://www.epa.gov/no2-pollution/basic-information-about-no2>, last updated September 8, 2016. Accessed January 2022.

<sup>20</sup> USEPA, Nitrogen Dioxide (NO<sub>2</sub>) Pollution.

<sup>21</sup> CARB, Nitrogen Dioxide & Health.

<sup>22</sup> CARB, Nitrogen Dioxide & Health.

<sup>23</sup> CARB, Nitrogen Dioxide & Health.

<sup>24</sup> CARB, Nitrogen Dioxide & Health.

<sup>25</sup> CARB, Carbon Monoxide & Health, <https://ww2.arb.ca.gov/resources/carbon-monoxide-and-health>. Accessed January 2022.

<sup>26</sup> USEPA, Carbon Monoxide (CO) Pollution in Outdoor Air, <https://www.epa.gov/co-pollution/basic-information-about-carbon-monoxide-co-outdoor-air-pollution>, last updated September 8, 2016. Accessed May 2021.

are elevated outdoors, they can be of particular concern for people with some types of heart disease since these people already have a reduced ability for getting oxygenated blood to their hearts and are especially vulnerable to the effects of CO when exercising or under increased stress.<sup>27</sup> In these situations, short-term exposure to elevated CO may result in reduced oxygen to the heart accompanied by chest pain also known as angina.<sup>28</sup> According to CARB, the most common effects of CO exposure are fatigue, headaches, confusion, and dizziness due to inadequate oxygen delivery to the brain.<sup>29</sup> For people with cardiovascular disease, short-term CO exposure can further reduce their body's already compromised ability to respond to the increased oxygen demands of exercise, exertion, or stress; inadequate oxygen delivery to the heart muscle leads to chest pain and decreased exercise tolerance.<sup>30</sup> Unborn babies, infants, elderly people, and people with anemia or with a history of heart or respiratory disease are most likely to experience health effects with exposure to elevated levels of CO.<sup>31</sup>

**Sulfur Dioxide (SO<sub>2</sub>):** According to the USEPA, the largest source of SO<sub>2</sub> emissions in the atmosphere is the burning of fossil fuels by power plants and other industrial facilities while smaller sources of SO<sub>2</sub> emissions include industrial processes such as extracting metal from ore; natural sources such as volcanoes; and locomotives, ships and other vehicles and heavy equipment that burn fuel with a high sulfur content.<sup>32</sup> In 2006, California phased-in the ultra-low-sulfur diesel regulation limiting vehicle diesel fuel to a sulfur content not exceeding 15 parts per million, down from the previous requirement of 500 parts per million, substantially reducing emissions of sulfur from diesel combustion.<sup>33</sup> According to the USEPA, short-term exposures to SO<sub>2</sub> can harm the human respiratory system and make breathing difficult.<sup>34</sup> According to CARB, health effects at levels near the State one-hour standard are those of asthma exacerbation, including bronchoconstriction accompanied by symptoms of respiratory irritation such as wheezing, shortness of breath and chest tightness, especially during exercise or physical activity and exposure at elevated levels of SO<sub>2</sub> (above 1 part per million (ppm)) results in increased incidence of pulmonary symptoms and disease, decreased pulmonary function, and increased risk of mortality.<sup>35</sup> Children, the elderly, and those with asthma, cardiovascular disease, or chronic lung disease (such as bronchitis or emphysema) are most likely to experience the adverse effects of SO<sub>2</sub>.<sup>36,37</sup>

<sup>27</sup> USEPA, Carbon Monoxide (CO) Pollution in Outdoor Air.

<sup>28</sup> USEPA, Carbon Monoxide (CO) Pollution in Outdoor Air.

<sup>29</sup> CARB, Carbon Monoxide & Health.

<sup>30</sup> CARB, Carbon Monoxide & Health.

<sup>31</sup> CARB, Carbon Monoxide & Health.

<sup>32</sup> USEPA, Sulfur Dioxide (SO<sub>2</sub>) Pollution, <https://www.epa.gov/so2-pollution/sulfur-dioxide-basics>, last updated June 28, 2018. Accessed January 2022.

<sup>33</sup> CARB, Final Regulation Order, Amendments to the California Diesel Fuel Regulations, Amend Section 2281, Title 13, California Code of Regulations, <https://www.arb.ca.gov/regact/ulsd2003/fro2.pdf>, approved July 15, 2004. Accessed January 2022.

<sup>34</sup> USEPA, Sulfur Dioxide (SO<sub>2</sub>) Pollution.

<sup>35</sup> CARB, Sulfur Dioxide & Health, <https://ww2.arb.ca.gov/resources/sulfur-dioxide-and-health>. Accessed January 2022.

<sup>36</sup> CARB, Sulfur Dioxide & Health.

<sup>37</sup> USEPA, Sulfur Dioxide (SO<sub>2</sub>) Pollution.

**Particulate Matter (PM10 and PM2.5):** Particulate matter air pollution is a mixture of solid particles and liquid droplets found in the air.<sup>38</sup> Some particles, such as dust, dirt, soot, or smoke, are large or dark enough to be seen with the naked eye while other particles are so small they can only be detected using an electron microscope.<sup>39</sup> Particles are defined by their diameter for air quality regulatory purposes: inhalable particles with diameters that are generally 10 micrometers and smaller (PM10); and fine inhalable particles with diameters that are generally 2.5 micrometers and smaller (PM2.5).<sup>40</sup> Thus, PM2.5 comprises a portion or a subset of PM10. Sources of PM10 emissions include dust from construction sites, landfills and agriculture, wildfires and brush/waste burning, industrial sources, and wind-blown dust from open lands.<sup>41</sup> Sources of PM2.5 emissions include combustion of gasoline, oil, diesel fuel, or wood.<sup>42</sup> PM10 and PM2.5 may be either directly emitted from sources (primary particles) or formed in the atmosphere through chemical reactions of gases (secondary particles) such as SO<sub>2</sub>, NO<sub>x</sub>, and certain organic compounds.<sup>43</sup> According to CARB, both PM10 and PM2.5 can be inhaled, with some depositing throughout the airways; PM10 is more likely to deposit on the surfaces of the larger airways of the upper region of the lung while PM2.5 is more likely to travel into and deposit on the surface of the deeper parts of the lung, which can induce tissue damage, and lung inflammation.<sup>44</sup> Short-term (up to 24 hours duration) exposure to PM10 has been associated primarily with worsening of respiratory diseases, including asthma and chronic obstructive pulmonary disease, leading to hospitalization and emergency department visits.<sup>45</sup> The effects of long-term (months or years) exposure to PM10 are less clear, although studies suggest a link between long-term PM10 exposure and respiratory mortality. The International Agency for Research on Cancer published a review in 2015 that concluded that particulate matter in outdoor air pollution causes lung cancer.<sup>46</sup> Short-term exposure to PM2.5 has been associated with premature mortality, increased hospital admissions for heart or lung causes, acute and chronic bronchitis, asthma attacks, emergency room visits, respiratory symptoms, and restricted activity days and long-term exposure to PM2.5 has been linked to premature death, particularly in people who have chronic heart or lung diseases, and reduced lung function growth in children.<sup>47</sup> According to CARB, populations most likely to experience adverse health effects with exposure to PM10 and PM2.5 include older adults with chronic heart or lung disease, children, and asthmatics and children and infants are more susceptible to harm from inhaling pollutants such as PM10 and PM2.5 compared to healthy adults because they inhale more air per pound of body weight than do adults, spend more time outdoors, and have developing immune systems.<sup>48</sup>

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<sup>38</sup> USEPA, Particulate Matter (PM) Pollution, <https://www.epa.gov/pm-pollution/particulate-matter-pm-basics>, last updated November 14, 2018. Accessed January 2022.

<sup>39</sup> USEPA, Particulate Matter (PM) Pollution.

<sup>40</sup> USEPA, Particulate Matter (PM) Pollution.

<sup>41</sup> CARB, Inhalable Particulate Matter and Health (PM2.5 and PM10), <https://www.arb.ca.gov/research/aaqs/common-pollutants/pm/pm.htm>, last reviewed August 10, 2017. Accessed January 2022.

<sup>42</sup> CARB, Inhalable Particulate Matter and Health (PM2.5 and PM10).

<sup>43</sup> CARB, Inhalable Particulate Matter and Health (PM2.5 and PM10).

<sup>44</sup> CARB, Inhalable Particulate Matter and Health (PM2.5 and PM10).

<sup>45</sup> CARB, Inhalable Particulate Matter and Health (PM2.5 and PM10).

<sup>46</sup> CARB, Inhalable Particulate Matter and Health (PM2.5 and PM10).

<sup>47</sup> CARB, Inhalable Particulate Matter and Health (PM2.5 and PM10).

<sup>48</sup> CARB, Inhalable Particulate Matter and Health (PM2.5 and PM10).

**Lead (Pb):** Major sources of lead emissions include ore and metals processing, piston-engine aircraft operating on leaded aviation fuel, waste incinerators, utilities, and lead-acid battery manufacturers.<sup>49</sup> In the past, leaded gasoline was a major source of lead emissions; however, the removal of lead from gasoline has resulted in a decrease of lead in the air by 98 percent between 1980 and 2014.<sup>50</sup> Lead can adversely affect the nervous system, kidney function, immune system, reproductive and developmental systems and the cardiovascular system, and affects the oxygen carrying capacity of blood.<sup>51</sup> The lead effects most commonly encountered in current populations are neurological effects in children, such as behavioral problems and reduced intelligence, anemia, and liver or kidney damage.<sup>52</sup> Excessive lead exposure in adults can cause reproductive problems in men and women, high blood pressure, kidney disease, digestive problems, nerve disorders, memory and concentration problems, and muscle and joint pain.<sup>53</sup>

### Other Criteria Pollutants (California Only)

The California Ambient Air Quality Standards (CAAQS) regulate the same criteria pollutants as the National Ambient Air Quality Standards (NAAQS) but in addition, regulate State-identified criteria pollutants, including sulfates, hydrogen sulfide, visibility-reducing particles, and vinyl chloride.<sup>54</sup> With respect to the State-identified criteria pollutants (i.e., sulfates, hydrogen sulfide, visibility reducing particles, and vinyl chloride), the Project would either not emit them (i.e., hydrogen sulfide and vinyl chloride), or they would be accounted for as part of the pollutants estimated in this analysis (i.e., sulfates and visibility reducing particles). For example, visibility reducing particles are associated with particulate matter emissions and sulfates are associated with SO<sub>x</sub> emissions. Both particulate matter and SO<sub>x</sub> are included in the emissions estimates for the Project. A description of the health effects of the State-identified criteria air pollutants is provided below.

**Sulfates (SO<sub>4</sub><sup>2-</sup>):** Sulfates in the environment occur as a result of SO<sub>2</sub> (sulfur dioxide) being converted to SO<sub>4</sub><sup>2-</sup> compounds in the atmosphere where sulfur is first oxidized to SO<sub>2</sub> during the combustion process of sulfur containing, petroleum-derived fuels (e.g., gasoline and diesel fuel).<sup>55</sup> Exposure to SO<sub>4</sub><sup>2-</sup>, which are part of PM<sub>2.5</sub>, results in health effects similar to those from exposure to PM<sub>2.5</sub> including reduced lung function, aggravated asthmatic symptoms, and increased risk of emergency department visits, hospitalizations, and death in people who have chronic heart or lung diseases.<sup>56</sup> Population groups with higher risks of experiencing adverse health effects with exposure to SO<sub>4</sub><sup>2-</sup> include children, asthmatics, and older adults who have chronic heart or lung diseases.<sup>57</sup>

<sup>49</sup> USEPA, Lead Air Pollution, <https://www.epa.gov/lead-air-pollution/basic-information-about-lead-air-pollution>, last updated November 29, 2017. Accessed January 2022.

<sup>50</sup> USEPA, Lead Air Pollution.

<sup>51</sup> USEPA, Lead Air Pollution.

<sup>52</sup> CARB, Lead & Health, <https://ww2.arb.ca.gov/resources/lead-and-health>. Accessed January 2022.

<sup>53</sup> CARB, Lead & Health.

<sup>54</sup> CARB, California Ambient Air Quality Standards, <https://ww2.arb.ca.gov/resources/california-ambient-air-quality-standards>. Accessed January 2022.

<sup>55</sup> CARB, Sulfate & Health, <https://ww2.arb.ca.gov/resources/sulfate-and-health>. Accessed January 2022.

<sup>56</sup> CARB, Sulfate & Health.

<sup>57</sup> CARB, Sulfate & Health.

**Hydrogen Sulfide (H<sub>2</sub>S):** H<sub>2</sub>S is a colorless gas with a strong odor of rotten eggs. The most common sources of H<sub>2</sub>S emissions are oil and natural gas extraction and processing, and natural emissions from geothermal fields. Industrial sources of H<sub>2</sub>S include petrochemical plants and kraft paper mills. H<sub>2</sub>S is also formed during bacterial decomposition of human and animal wastes, and is present in emissions from sewage treatment facilities and landfills.<sup>58</sup> Exposure to H<sub>2</sub>S can induce tearing of the eyes and symptoms related to overstimulation of the sense of smell, including headache, nausea, or vomiting; additional health effects of eye irritation have only been reported with exposures greater than 50 ppm, which is considerably higher than the odor threshold.<sup>59</sup> H<sub>2</sub>S is regulated as a nuisance based on its odor detection level; if the standard were based on adverse health effects, it would be set at a much higher level.<sup>60</sup> According to CARB, there are insufficient data available to determine whether or not some groups are at greater risk than others.<sup>61</sup>

**Visibility-Reducing Particles:** Visibility-reducing particles come from a variety of natural and manmade sources and can vary greatly in shape, size and chemical composition. Visibility reduction is caused by the absorption and scattering of light by the particles in the atmosphere before it reaches the observer. Certain visibility-reducing particles are directly emitted to the air such as windblown dust and soot, while others are formed in the atmosphere through chemical transformations of gaseous pollutants (e.g., sulfates, nitrates, organic carbon particles) which are the major constituents of particulate matter. As the number of visibility reducing particles increases, more light is absorbed and scattered, resulting in less clarity, color, and visual range.<sup>62</sup> Exposure to some haze-causing pollutants have been linked to adverse health impacts similar to PM10 and PM2.5 as discussed above.<sup>63</sup>

**Vinyl Chloride:** Vinyl chloride is a colorless gas with a mild, sweet odor. Most vinyl chloride is used to make polyvinyl chloride (PVC) plastic and vinyl products and are generally emitted from industrial processes and other major sources of vinyl chloride have been detected near landfills, sewage plants, and hazardous waste sites, due to microbial breakdown of chlorinated solvents.<sup>64</sup> Short-term health effects of exposure to high levels of vinyl chloride in the air include central nervous system effects, such as dizziness, drowsiness, and headaches while long-term exposure to vinyl chloride through inhalation and oral exposure causes liver damage and has been shown to increase the risk of angiosarcoma, a rare form of liver cancer in humans.<sup>65</sup> Most health data on vinyl chloride relate to carcinogenicity; thus, the people most at risk are those who have long-term exposure to elevated levels, which is more likely to occur in occupational or industrial

<sup>58</sup> CARB, Hydrogen Sulfide & Health, <https://ww2.arb.ca.gov/resources/hydrogen-sulfide-and-health>. Accessed May 2021.

<sup>59</sup> CARB, Hydrogen Sulfide & Health.

<sup>60</sup> CARB, Hydrogen Sulfide & Health.

<sup>61</sup> CARB, Hydrogen Sulfide & Health.

<sup>62</sup> CARB, Visibility-Reducing Particles and Health, last reviewed October 11, 2016, <https://www.arb.ca.gov/research/aaqs/common-pollutants/vrp/vrp.htm>. Accessed January 2022.

<sup>63</sup> CARB, Visibility-Reducing Particles and Health.

<sup>64</sup> CARB, Vinyl Chloride & Health, <https://ww2.arb.ca.gov/resources/vinyl-chloride-and-health>. Accessed January 2022.

<sup>65</sup> CARB, Vinyl Chloride & Health.



settings; however, control methodologies applied to industrial facilities generally prevent emissions to the ambient air.<sup>66</sup>

## Toxic Air Contaminants

In addition to criteria pollutants, the SCAQMD periodically assesses levels of toxic air contaminants (TACs) in the Air Basin. A TAC is defined by California Health and Safety Code Section 39655:

*“Toxic air contaminant” means 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 pursuant to subsection (b) of Section 112 of the federal act (42 U.S.C. Sec. 7412(b)) is a toxic air contaminant.*

Diesel particulate matter, which is emitted in the exhaust from diesel engines, was listed by the State as a toxic air contaminant in 1998. Most major sources of diesel emissions, such as ships, trains, and trucks operate in and around ports, railyards, and heavily traveled roadways. These areas are often located near highly populated areas resulting in greater health consequences for urban areas than rural areas.<sup>67</sup> Diesel particulate matter has historically been used as a surrogate measure of exposure for all diesel exhaust emissions. Diesel particulate matter consists of fine particles (fine particles have a diameter <2.5 µm), including a subgroup of ultrafine particles (ultrafine particles have a diameter <0.1 µm). Collectively, these particles have a large surface area which makes them an excellent medium for absorbing organics. The visible emissions in diesel exhaust include carbon particles or “soot.” Diesel exhaust also contains a variety of harmful gases and cancer-causing substances.

Exposure to diesel particulate matter may be a health hazard, particularly to children whose lungs are still developing and the elderly who may have other serious health problems. Diesel particulate matter levels and resultant potential health effects may be higher in proximity to heavily traveled roadways with substantial truck traffic or near industrial facilities. According to CARB, diesel particulate matter exposure may lead to the following adverse health effects: (1) Aggravated asthma; (2) Chronic bronchitis; (3) Increased respiratory and cardiovascular hospitalizations; (4) Decreased lung function in children; (5) Lung cancer; and (6) Premature deaths for people with heart or lung disease.<sup>68,69</sup>

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<sup>66</sup> CARB, Vinyl Chloride & Health.

<sup>67</sup> CARB, Overview: Diesel Exhaust and Health, <https://www.arb.ca.gov/research/diesel/diesel-health.htm>. Accessed January 2022.

<sup>68</sup> CARB, Diesel and Health Research, <http://www.arb.ca.gov/research/diesel/diesel-health.htm>. Accessed January 2022.

<sup>69</sup> CARB, Diesel Particulate Matter Health Risk Assessment Study for the West Oakland Community: Preliminary Summary of Results, (2008), <http://www.arb.ca.gov/ch/communities/ra/westoakland/documents/factsheet0308.pdf>. Accessed January 2022.

In August 2021, the SCAQMD released the Final Multiple Air Toxics Exposure Study V (MATES V).<sup>70</sup> The MATES V study includes a fixed site monitoring program with ten stations, an updated emissions inventory of TACs, and a modeling effort to characterize risk across the Air Basin. The purpose of the fixed site monitoring is to characterize long-term regional air toxics levels in residential and commercial areas. In addition to new measurements and updated modeling results, several key updates were implemented in MATES V. First, MATES V estimates cancer risks by taking into account multiple exposure pathways, which includes inhalation and non-inhalation pathways. This approach is consistent with how cancer risks are estimated in South Coast AQMD's programs such as permitting, Air Toxics Hot Spots (AB2588), and CEQA. Previous MATES studies quantified the cancer risks based on the inhalation pathway only. Second, along with cancer risk estimates, 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 Hazard Assessment (OEHHA) and CalEPA risk assessment methodologies and modern statistical methods to examine the trends over time. This has led to a reduction of the Air Basin average air toxics cancer risk in MATES V of 455 in one million, compared to MATES IV of 997 in one million.<sup>71</sup> The key takeaways from the MATES V study: air toxics cancer risk has decreased by about 50 percent since MATES IV based on modeling data, MATES V Basin average multi-pathway air toxics cancer risk is 455 in a million, with the highest risk locations being in the Los Angeles International Airport, downtown and the ports areas, diesel particulate matter is the main risk driver for air toxics cancer risk, goods movement and transportation corridors have the highest air toxics cancer risks, and the chronic noncancer risk was estimated for the first time with a chronic hazard index of approximately 5 to 9 across all ten fixed stations.<sup>72</sup>

## Local Air Quality

The SCAQMD maintains a network of air quality monitoring stations located throughout the Air Basin to measure ambient pollutant concentrations. The Project Site is located in SCAQMD Source Receptor Area (SRA) 2; therefore, the monitoring station most representative of the Project Site is the Northwest Coastal LA County Monitoring Station. Criteria pollutants monitored at this station include ozone, NO<sub>2</sub>, and CO. The Southwest Coastal LA County Monitoring Station was used to report data for SO<sub>2</sub>, lead, and PM<sub>10</sub>. The Central LA station was used for PM<sub>2.5</sub> monitoring data. Air quality monitoring data available from the SCAQMD for these monitoring stations are summarized in **Table 2, Ambient Air Quality Data**.

<sup>70</sup> SCAQMD, 2021. Final Report Multiple Air Toxics Exposure Study in the South Coast Air Basin MATES V. <http://www.aqmd.gov/docs/default-source/planning/mates-v/mates-v-final-report.pdf?sfvrsn=4>, accessed January 2022.

<sup>71</sup> SCAQMD, 2021. FinalDraft Report Multiple Air Toxics Exposure Study in the South Coast Air Basin MATES V, April. <http://www.aqmd.gov/docs/default-source/planning/mates-v/mates-v-final-report.pdf?sfvrsn=4><http://www.aqmd.gov/home/air-quality/air-quality-studies/health-studies/mates-v>, accessed January 2022.

<sup>72</sup> SCAQMD, 2021. Multiple Air Toxics Exposure Study V (MATES V): Overview of Results and Major Changes, MATES V Technical Advisory Group Meeting April 14, 2021. <http://www.aqmd.gov/docs/default-source/planning/mates-v/mates-v-tag-item2-overview.pdf?sfvrsn=12>, accessed January 2022.

**TABLE 2  
AMBIENT AIR QUALITY DATA**

<b>Pollutant/Standard</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>
<b>O<sub>3</sub> (1-hour)</b>			
Maximum Concentration (ppm)	0.098	0.086	0.134
Days > CAAQS (0.09 ppm)	0	0	6
<b>O<sub>3</sub> (8-hour)</b>			
Maximum Concentration (ppm)	0.073	0.075	0.092
4 <sup>th</sup> High 8-hour Concentration (ppm)	0.068	0.064	0.078
Days > CAAQS (0.070 ppm)	2	1	8
Days > NAAQS (0.075 ppm)	0	0	5
<b>NO<sub>2</sub> (1-hour)</b>			
Maximum Concentration (ppm)	0.065	0.049	0.077
98 <sup>th</sup> Percentile Concentration (ppm)	0.046	0.043	0.044
<b>NO<sub>2</sub> (Annual)</b>			
Annual Arithmetic Mean (0.030 ppm)	0.013	0.010	0.011
<b>CO (1-hour)</b>			
Maximum Concentration (ppm)	1.6	1.9	2.0
<b>CO (8-hour)</b>			
Maximum Concentration (ppm)	1.3	1.2	1.2
<b>SO<sub>2</sub> (1-hour)</b>			
Maximum Concentration (ppm)	0.012	0.008	0.006
99 <sup>th</sup> Percentile Concentration (ppm)	0.005	0.004	0.003
<b>SO<sub>2</sub> (24-hour)</b>			
Maximum Concentration (ppm)	--	--	--
<b>PM<sub>10</sub> (24-hour)</b>			
Maximum Concentration (µg/m <sup>3</sup> )	45	62	73
Samples > CAAQS (50 µg/m <sup>3</sup> )	0	2	0
Samples > NAAQS (150 µg/m <sup>3</sup> )	0	0	0
<b>PM<sub>10</sub> (Annual Average)</b>			
Annual Arithmetic Mean (20 µg/m <sup>3</sup> )	20.5	19.2	22.5
<b>PM<sub>2.5</sub> (24-hour)</b>			
Maximum Concentration (µg/m <sup>3</sup> )	43.8	43.5	47.3
98 <sup>th</sup> Percentile Concentration (µg/m <sup>3</sup> )	30.5	28.3	28.0
Samples > NAAQS (35 µg/m <sup>3</sup> )	3	1	2
<b>PM<sub>2.5</sub> (Annual)</b>			
Annual Arithmetic Mean (12 µg/m <sup>3</sup> )	12.58	10.85	12.31
<b>Lead</b>			
Maximum 30-day average (µg/m <sup>3</sup> )	0.005	0.004	0.013

<sup>a</sup> ppm = parts per million; µg/m<sup>3</sup> = micrograms per cubic meter

<sup>b</sup> The monitoring station most representative of the Project Site is Station number 91 in Northwest Coastal LA County, which is used to establish ambient ozone, NO<sub>2</sub>, and CO, levels. Since data for SO<sub>2</sub>, lead, PM<sub>10</sub> and PM<sub>2.5</sub> are not monitored at this station, the Station in Southwest Coastal LA County was used to report data for SO<sub>2</sub>, lead, and PM<sub>10</sub> and the Central LA Station was used to report data for PM<sub>2.5</sub>. The most recent data available from SCAQMD for these monitoring stations are from years 2018 to 2020.

<sup>c</sup> CAAQS are based on a not to exceed standard. NAAQS are based on a 3-year average of the annual 4<sup>th</sup> highest daily maximum 8-hour concentration for ozone; 98<sup>th</sup> percentile of 1-hour daily maximum concentrations averaged over 3 years for 1-hr NO<sub>2</sub>; and not to be exceeded more than once per year on average over 3 years for 24-hr PM.

<sup>d</sup> State annual average (AAM) PM<sub>10</sub> standard is > 20 µg/m<sup>3</sup>. Federal annual PM<sub>10</sub> standard (AAM > 50 µg/m<sup>3</sup>) was revoked in 2006.

<sup>e</sup> Both Federal and State standards are annual average (AAM) > 12.0 µg/m<sup>3</sup>.

SOURCE: SCAQMD, Historical Data by Year, [www.aqmd.gov/home/air-quality/air-quality-data-studies/historical-data-by-year](http://www.aqmd.gov/home/air-quality/air-quality-data-studies/historical-data-by-year); USEPA, AirData, [www.epa.gov/airdata/ad\\_rep\\_mon.html](http://www.epa.gov/airdata/ad_rep_mon.html). Accessed January 2022

Additionally, the SCAQMD has prepared a series of maps that show regional trends in estimated outdoor inhalation cancer risk from toxic emissions, as part of an ongoing effort to provide insight into relative risks. The maps represent the estimated number of potential cancers per million people associated with a lifetime of breathing air toxics (24 hours per day outdoors for 70 years). The background potential cancer risk per million people in the Project Site area is estimated at approximately 468 in one million (compared to an overall Air Basin-wide risk of 455 in one million for the average of 10 fixed monitoring sites).<sup>73</sup> Generally, the risk from air toxics is lower near the coastline and increases inland, with higher risks concentrated near large diesel sources (e.g., freeways, airports, and ports).

## 1.7 Sensitive Receptors

Certain population groups, such as children, elderly, and acutely and chronically ill persons (especially those with cardio-respiratory diseases), are considered more sensitive to the potential effects of air pollution than others. Sensitive land uses within 500 feet of the Project Site are shown in Figure 2 and include the following:

- Existing residences to the north/northwest/northeast of the Project site, on the north side of Higuera Street, approximately 75 feet from the Project boundary.
- Existing residences to the west of the Project Site, at the west end of Hayden Place and along Lucerne Avenue, approximately 460 feet from the Project boundary.

All other air quality sensitive receptors are located at greater distances from the Project Site, and would be less impacted by Project emissions. Impacts are quantified for the sensitive receptors listed here.

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<sup>73</sup> South Coast Air Quality Management District, Multiple Air Toxics Exposure Study, MATES IV Carcinogenic Risk Interactive Map.

## SECTION 2

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# Regulatory Framework

A number of statutes, regulations, plans and policies have been adopted which address air quality concerns. The Project Site and vicinity is subject to air quality regulations developed and implemented at the federal, State, and local levels. At the federal level, the USEPA is responsible for implementation of the federal Clean Air Act (CAA). Some portions of the CAA (e.g., certain mobile source requirements and other requirements) are implemented directly by the USEPA. Other portions of the CAA (e.g., stationary source requirements) are implemented through delegation of authority to State and local agencies. A number of plans and policies have been adopted by various agencies that address air quality concerns. Those plans and policies that are relevant to the Project are discussed below.

### 2.1 Federal

The federal CAA was enacted in 1955 and has been amended numerous times in subsequent years, with the most recent amendments occurring in 1990.<sup>74</sup> The CAA is the comprehensive federal law that regulates air emissions in order to protect public health and welfare.<sup>75</sup> The USEPA is responsible for the implementation and enforcement of the CAA, which establishes federal NAAQS, specifies future dates for achieving compliance, and requires USEPA to designate areas as attainment, nonattainment, or maintenance. The CAA also mandates that each state submit and implement a State Implementation Plan (SIP) for each criteria pollutant for which the state has not achieved the applicable NAAQS. The SIP includes pollution control measures that demonstrate how the standards for those pollutants will be met. The sections of the CAA most applicable to the Project include Title I (Nonattainment Provisions) and Title II (Mobile Source Provisions).<sup>76,77</sup>

Title I requirements are implemented for the purpose of attaining NAAQS for criteria air pollutants. The NAAQS were amended in July 1997 to include an 8-hour standard for ozone and to adopt a NAAQS for PM<sub>2.5</sub>. The NAAQS were also amended in September 2006 to include an established methodology for calculating PM<sub>2.5</sub>, as well to revoke the annual PM<sub>10</sub> threshold.

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<sup>74</sup> 42 United States Code §7401 et seq. (1970).

<sup>75</sup> Summary of the Clean Air Act, <https://www.epa.gov/laws-regulations/summary-clean-air-act>. Accessed January 2022.

<sup>76</sup> U.S. Environmental Protection Agency, Clean Air Act Overview, Clean Air Act Table of Contents by Title, Last Updated January 3, 2017, <https://www.epa.gov/clean-air-act-overview/clean-air-act-text>. Accessed January 2022. As shown therein, Title I addresses nonattainment areas and Title II addresses mobile sources.

<sup>77</sup> Mobile sources include on-road vehicles (e.g. cars, buses, motorcycles) and non-road vehicles e.g. aircraft, trains, construction equipment). Stationary sources are comprised of both point and area sources. Point sources are stationary facilities that emit large amount of pollutants (e.g. municipal waste incinerators, power plants). Area sources are smaller stationary sources that alone are not large emitters, but combined can account for large amounts of pollutants (e.g. consumer products, residential heating, dry cleaners).

**Table 3, *Ambient Air Quality Standards***, shows the NAAQS currently in effect for each criteria pollutant. The NAAQS and the CAAQS for the California criteria air pollutants (discussed below) have been set at levels considered safe to protect public health, including the health of sensitive populations such as asthmatics, children, and the elderly with a margin of safety; and to protect public welfare, including against decreased visibility and damage to animals, crops, vegetation, and buildings.<sup>78</sup>In addition to criteria pollutants, Title I also includes air toxics provisions which require USEPA to develop and enforce regulations to protect the public from exposure to airborne contaminants that are known to be hazardous to human health. In accordance with Section 112, USEPA establishes National Emission Standards for Hazardous Air Pollutants. The list of hazardous air pollutants (HAPs), or air toxics, includes specific compounds that are known or suspected to cause cancer or other serious health effects.

Title II requirements pertain to mobile sources, such as cars, trucks, buses, and planes. Reformulated gasoline, automobile pollution control devices, and vapor recovery nozzles on gas pumps are a few of the mechanisms the USEPA uses to regulate mobile air emission sources. The provisions of Title II have resulted in tailpipe emission standards for vehicles, which have been strengthened in recent years to improve air quality. For example, the standards for NO<sub>x</sub> emissions have been lowered substantially, and the specification requirements for cleaner burning gasoline are more stringent.

**TABLE 3  
AMBIENT AIR QUALITY STANDARDS**

Pollutant	Average Time	California Standards <sup>a</sup>		National Standards <sup>b</sup>		
		Concentration <sup>c</sup>	Method <sup>d</sup>	Primary <sup>c,e</sup>	Secondary <sup>c,f</sup>	Method <sup>g</sup>
O <sub>3</sub> <sup>h</sup>	1 Hour	0.09 ppm (180 µg/m <sup>3</sup> )	Ultraviolet Photometry	—	Same as Primary Standard	Ultraviolet Photometry
	8 Hour	0.070 ppm (137 µg/m <sup>3</sup> )		0.070 ppm (137 µg/m <sup>3</sup> )		
NO <sub>2</sub> <sup>i</sup>	1 Hour	0.18 ppm (339 µg/m <sup>3</sup> )	Gas Phase Chemi- luminescence	100 ppb (188 µg/m <sup>3</sup> )	None	Gas Phase Chemi- luminescence
	Annual Arithmetic Mean	0.030 ppm (57 µg/m <sup>3</sup> )		53 ppb (100 µg/m <sup>3</sup> )	Same as Primary Standard	
CO	1 Hour	20 ppm (23 mg/m <sup>3</sup> )	Non-Dispersive Infrared Photometry (NDIR)	35 ppm (40 mg/m <sup>3</sup> )	None	Non-Dispersive Infrared Photometry (NDIR)
	8 Hour	9.0 ppm (10mg/m <sup>3</sup> )		9 ppm (10 mg/m <sup>3</sup> )		
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m <sup>3</sup> )		—	—	

<sup>78</sup> USEPA, NAAQS Table, <https://www.epa.gov/criteria-air-pollutants/naaqs-table>. Accessed January 2022.

Pollutant	Average Time	California Standards <sup>a</sup>		National Standards <sup>b</sup>		
		Concentration <sup>c</sup>	Method <sup>d</sup>	Primary <sup>c,e</sup>	Secondary <sup>c,f</sup>	Method <sup>g</sup>
SO <sub>2</sub> <sup>j</sup>	1 Hour	0.25 ppm (655 µg/m <sup>3</sup> )	Ultraviolet Fluorescence	75 ppb (196 µg/m <sup>3</sup> )	—	Ultraviolet Fluorescence; Spectrophotometry (Pararosaniline Method) <sup>9</sup>
	3 Hour	—		—	0.5 ppm (1300 µg/m <sup>3</sup> )	
	24 Hour	0.04 ppm (105 µg/m <sup>3</sup> )		0.14 ppm (for certain areas) <sup>j</sup>	—	
	Annual Arithmetic Mean	—		0.030 ppm (for certain areas) <sup>j</sup>	—	
PM <sub>10</sub> <sup>k</sup>	24 Hour	50 µg/m <sup>3</sup>	Gravimetric or Beta Attenuation	150 µg/m <sup>3</sup>	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m <sup>3</sup>		—		
PM <sub>2.5</sub> <sup>k</sup>	24 Hour	No Separate State Standard		35 µg/m <sup>3</sup>	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m <sup>3</sup>	Gravimetric or Beta Attenuation	12.0 µg/m <sup>3</sup> <sup>k</sup>		
Lead <sup>l,m</sup>	30 Day Average	1.5 µg/m <sup>3</sup>	Atomic Absorption	—	Same as Primary Standard	High Volume Sampler and Atomic Absorption
	Calendar Quarter	—		1.5 µg/m <sup>3</sup> (for certain areas) <sup>m</sup>		
	Rolling 3-Month Average <sup>m</sup>	--		0.15 µg/m <sup>3</sup>		
Visibility Reducing Particles <sup>n</sup>	8 Hour	Extinction coefficient of 0.23 per kilometer — visibility of 10 miles or more (0.07 — 30 miles or more for Lake Tahoe) due to particles when relative humidity is less than 70 percent. Method: Beta Attenuation and Transmittance through Filter Tape.		No Federal Standards		
Sulfates (SO <sub>4</sub> )	24 Hour	25 µg/m <sup>3</sup>	Ion Chromatography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m <sup>3</sup> )	Ultraviolet Fluorescence			
Vinyl Chloride <sup>l</sup>	24 Hour	0.01 ppm (26 µg/m <sup>3</sup> )	Gas Chromatography			

- a California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, and particulate matter (PM<sub>10</sub>, PM<sub>2.5</sub>, 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.
- b National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone 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<sub>10</sub>, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 micrograms/per cubic meter (µg/m<sup>3</sup>) is equal to or less than one. For PM<sub>2.5</sub>, 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.

Pollutant	Average Time	California Standards <sup>a</sup>		National Standards <sup>b</sup>		
		Concentration <sup>c</sup>	Method <sup>d</sup>	Primary <sup>c,e</sup>	Secondary <sup>c,f</sup>	Method <sup>g</sup>

- c Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.
- d Any equivalent procedure which can be shown to the satisfaction of the California Air Resources Board to give equivalent results at or near the level of the air quality standard may be used.
- e National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.
- f National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
- g Reference method as described by the USEPA. An “equivalent method” of measurement may be used but must have a “consistent relationship to the reference method” and must be approved by the USEPA.
- h On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.
- i To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national 1-hour standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national 1-hour standard to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.
- j On June 2, 2010, a new 1-hour SO<sub>2</sub> standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO<sub>2</sub> national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated non-attainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.
- k On December 14, 2012, the national annual PM<sub>2.5</sub> primary standard was lowered from 15 µg/m<sup>3</sup> to 12.0 µg/m<sup>3</sup>.
- l The California Air Resources Board has identified lead and vinyl chloride as ‘toxic air contaminants’ with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.
- m The national standard for lead was revised on October 15, 2008 to a rolling three-month average. The 1978 lead standard (1.5 µg/m<sup>3</sup> as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated non-attainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.
- n In 1989, the California Air Resources Board converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are “extinction of 0.23 per kilometer” and “extinction of 0.07 per kilometer” for the statewide and Lake Tahoe Air Basin standards, respectively.

Source: California Air Resources Board, Ambient Air Quality Standards (5/4/16). Available <https://ww2.arb.ca.gov/resources/documents/ambient-air-quality-standards-0>. Accessed January 2022.

**Table 4, South Coast Air Basin Attainment Status (Los Angeles County)**, shows the attainment status of the Air Basin for each criteria pollutant. As shown in Table 4, the Air Basin is designated under federal or state ambient air quality standards as nonattainment for ozone, PM10, and PM2.5. The Los Angeles County portion of the Air Basin is designated as nonattainment for the federal lead standard; however, this was due to localized emissions from 2 lead-acid battery recycling facilities in the city of Vernon and the city of Industry that are no longer operating.<sup>79</sup>

As shown in Table 4, the Air Basin is designated under federal or state ambient air quality standards as nonattainment for ozone, PM10, and PM2.5. The Los Angeles County portion of the Air Basin is designated as nonattainment for the federal lead standard; however, this is due to localized emissions from two lead-acid battery recycling facilities in the City of Vernon and the City of Industry that are no longer operating.<sup>80</sup>

<sup>79</sup> South Coast Air Quality Management District, Board Meeting, Agenda No. 30, Adopt the 2012 Lead State Implementation Plan for Los Angeles County, May 4, 2012.

<sup>80</sup> SCAQMD, Board Meeting, Agenda No. 30, Adopt the 2012 Lead State Implementation Plan for Los Angeles County, May 4, 2012.



**TABLE 4**  
**SOUTH COAST AIR BASIN ATTAINMENT STATUS (LOS ANGELES COUNTY)**

<b>Pollutant</b>	<b>National Standards (NAAQS)</b>	<b>California Standards (CAAQS)</b>
O <sub>3</sub> (1-hour standard)	N/A <sup>a</sup>	Non-attainment – Extreme
O <sub>3</sub> (8-hour standard)	Non-attainment – Extreme	Non-attainment
CO	Attainment	Attainment
NO <sub>2</sub>	Attainment	Attainment
SO <sub>2</sub>	Attainment	Attainment
PM10	Attainment	Non-attainment
PM2.5	Non-attainment – Serious	Non-attainment
Lead (Pb)	Non-attainment (Partial) <sup>b</sup>	Attainment
Visibility Reducing Particles	N/A	Unclassified
Sulfates	N/A	Attainment
Hydrogen Sulfide	N/A	Unclassified
Vinyl Chloride <sup>c</sup>	N/A	N/A

N/A = not applicable

<sup>a</sup> The NAAQS for 1-hour ozone was revoked on June 15, 2005, for all areas except Early Action Compact areas.

<sup>b</sup> Partial Non-attainment designation – Los Angeles County portion of the Air Basin only for near-source monitors.

<sup>c</sup> In 1990, the California Air Resources Board identified vinyl chloride as a toxic air contaminant and determined that it does not have an identifiable threshold. Therefore, the California Air Resources Board does not monitor or make status designations for this pollutant.

SOURCE: USEPA, The Green Book Non-Attainment Areas for Criteria Pollutants, <https://www.epa.gov/green-book>; CARB, Area Designations Maps/State and National, <http://www.arb.ca.gov/degis/adm/adm.htm>. Accessed January 2022.

As detailed in the Air Quality Management Plan (AQMP), the major sources of air pollution in the Air Basin are divided into four major source classifications: point, and area stationary sources, and on-road and off-road mobile sources. Point and area sources are the two major subcategories of stationary sources.<sup>81</sup> Point sources are permitted facilities that contain one or more emission sources at an identified location (e.g., power plants, refineries, emergency generator exhaust stacks). Area sources consist of many small emission sources (e.g., residential water heaters, architectural coatings, consumer products, restaurant charbroilers and permitted sources such as large boilers) which are distributed across the region. Mobile sources consist of two main subcategories: On-road sources (such as cars and trucks) and off-road sources (such as heavy construction equipment).

## 2.2 State

### California Air Resources Board

The California Clean Air Act (CCAA), signed into law in 1988, requires all areas of California to achieve and maintain the CAAQS. CARB, a part of the California Environmental Protection Agency, is responsible for the coordination and administration of both federal and state air

<sup>81</sup> SCAQMD, 2016 AQMP, page 3-32.

pollution control programs within California. In this capacity, CARB conducts research, sets the CAAQS, compiles emission inventories, develops suggested control measures, and provides oversight of local programs. CARB establishes emissions standards for motor vehicles sold in California, consumer products (such as hairspray, aerosol paints, and barbecue lighter fluid), and various types of commercial equipment. It also sets fuel specifications to further reduce vehicular emissions. CARB has primary responsibility for the development of California's SIP, for which it works closely with the federal government and the local air districts. The SIP is required for the state to take over implementation of the federal CAA from USEPA.

## California Clean Air Act

The California Clean Air Act, signed into law in 1988, requires all areas of the state to achieve and maintain the CAAQS by the earliest practical date. The CAAQS are established to protect the health of the most sensitive groups and apply to the same criteria pollutants as the federal Clean Air Act and also includes State-identified criteria pollutants, which are sulfates, visibility-reducing particles, hydrogen sulfide, and vinyl chloride.<sup>82</sup> CARB has primary responsibility for ensuring the implementation of the California Clean Air Act,<sup>83</sup> responding to the federal Clean Air Act planning requirements applicable to the state, and regulating emissions from motor vehicles and consumer products within the state.

Health and Safety Code Section 39607(e) requires CARB to establish and periodically review area designation criteria. Table 4 provides a summary of the attainment status of the Los Angeles County portion of the Air Basin with respect to the state standards. The Air Basin is designated as attainment for the California standards for sulfates and unclassified for hydrogen sulfide and visibility-reducing particles. The Air Basin is currently in non-attainment for ozone, PM10, and PM2.5 under the CAAQS. Since vinyl chloride is a carcinogenic toxic air contaminant, CARB does not classify attainment status for this pollutant.

## California Code of Regulations

The California Code of Regulations (CCR) is the official compilation and publication of regulations adopted, amended or repealed by the state agencies pursuant to the Administrative Procedure Act. The CCR includes regulations that pertain to air quality emissions. Specifically, Section 2485 in Title 13 of the CCR states that the idling of all diesel-fueled commercial vehicles (weighing over 10,000 pounds) during construction shall be limited to five minutes at any location. In addition, Section 93115 in Title 17 of the CCR states that operations of any stationary, diesel-fueled, compression-ignition engines shall meet specified fuel and fuel additive requirements and emissions standards.

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<sup>82</sup> CARB, California Ambient Air Quality Standards (CAAQS), last reviewed August 10, 2017.

<sup>83</sup> Chapter 1568 of the Statutes of 1988.

## California Air Resources Board On-Road and Off-Road Vehicle Rules

In 2004, CARB adopted an Airborne Toxic Control Measure (ATCM) to limit heavy-duty diesel motor vehicle idling in order to reduce public exposure to diesel PM and other TACs (Title 13 California Code of Regulations [CCR], Section 2485). The measure applies to diesel-fueled commercial vehicles with gross vehicle weight ratings greater than 10,000 pounds that are licensed to operate on highways, regardless of where they are registered. This measure does not allow diesel-fueled commercial vehicles to idle for more than five minutes at any given time.

In 2008 CARB approved the Truck and Bus regulation to reduce NO<sub>x</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> emissions from existing diesel vehicles operating in California (13 CCR, Section 2025). The requirements were amended to apply to nearly all diesel-fueled trucks and busses with a gross vehicle weight rating (GVWR) greater than 14,000 pounds. For the largest trucks in the fleet, those with a GVWR greater than 26,000 pounds, all must be equipped with diesel particulate filters (DPFs) from 2014 and onward, and must have 2010 model year engines by January 1, 2023. For trucks and buses with a GVWR of 14,001 to 26,000 pounds, those with engine model years 14 to 20 years or older must be replaced with 2010 model year engines in accordance with the schedule specified in the regulation.

In addition to limiting exhaust from idling trucks, CARB also promulgated emission standards for off-road diesel construction equipment of greater than 25 horsepower such as bulldozers, loaders, backhoes and forklifts, as well as many other self-propelled off-road diesel vehicles. The regulation adopted by the CARB on July 26, 2007, reduces emissions by requiring the installation of diesel soot filters and the retirement, replacement, or repowering of older, dirtier engines with newer emission control models (13 CCR, Section 2449). Implementation is staggered based on fleet size (which is the total of all off-road horsepower under common ownership or control), with the largest fleets to begin compliance in 2014, medium fleets in 2017, and small fleets in 2019. Each fleet must demonstrate compliance through one of two methods. The first option is to calculate and maintain fleet average emissions targets, which encourages the retirement or repowering of older equipment and rewards the introduction of newer cleaner units into the fleet. The second option is to meet the Best Available Control Technology (BACT) requirements by turning over or installing Verified Diesel Emission Control Strategies (VDECS) on a certain percentage of its total fleet horsepower. The compliance schedule requires that BACT turn overs or retrofits (VDECS installation) be fully implemented by 2023 in all equipment for large and medium fleets and by 2028 for small fleets.

In June 2020, the Advanced Clean Trucks (ACT) regulation was approved by CARB, which mandates zero-emission vehicle (ZEV) sales requirements for truck manufacturers and a one-time reporting requirement for large entities and fleets.<sup>84</sup> The regulation is designed to accelerate widespread adoption of ZEVs in the medium- and heavy-duty truck sector to reduce on-road mobile source emissions on the path to carbon neutrality by 2045 (EO B-55-18). Starting in 2024, zero-emission powertrain certification will be required. Vehicle classes separate vehicles by their

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<sup>84</sup> CARB, Advanced Clean Trucks, <https://ww2.arb.ca.gov/our-work/programs/advanced-clean-trucks>. Accessed January 2021.

GVWR, maximum weight, and classes range from 1 to 8. However, in the context of ACT, Class 2b–3 group includes on-road vehicles with a GVWR that is 8,501 pounds up to 14,000 pounds; Class 4–8 group includes on-road vehicles with a GVWR that is 14,001 pounds and above, including “yard tractors”; and Class 7–8 group includes on-road vehicles that have a GVWR 26,001 pounds and above, including vehicles defined as “tractors”.<sup>85</sup> The ACT has different truck sales requirement for the different vehicle groups. Manufacturers will need to increase their percentage of ZEVs in order to achieve 55 percent of Class 2b–3 truck sales, 75 percent of Class 4–8 Vocational straight truck sales, and 40 percent of Class 7–8 Tractor sales by 2035. Currently, there are over 70 different models of ZE vans, trucks, and buses commercially available.<sup>86</sup> Most recently, in September 2020, Governor Gavin Newsom announced Executive Order N-79-20 stating that 100 percent of new passenger cars and 100 percent of operations for drayage trucks and off-road vehicles and equipment shall be ZE by 2035. By 2045, 100 percent of operations of medium- and heavy-duty vehicles shall be ZE.<sup>87</sup>

## Toxic Air Contaminants

The California Air Toxics Program was established in 1983, when the California Legislature adopted Assembly Bill (AB) 1807 to establish a two-step process of risk identification and risk management to address potential health effects from exposure to toxic substances in the air. In the risk identification step, CARB and OEHHA determine if a substance should be formally identified, or “listed”, as a TAC in California. Inception of the program, a number of such substances have been listed ([www.arb.ca.gov/toxics.id/taclist.htm](http://www.arb.ca.gov/toxics.id/taclist.htm)). In 1993, the California Legislature amended the program to identify the 189 federal HAPs as TACs. The SCAQMD has not adopted guidance applicable to land use projects that requires a quantitative health risk assessments be performed for construction exposures to TAC emissions.<sup>88</sup> The SCAQMD states that: “SCAQMD currently does not have guidance on construction Health Risk Assessments.”<sup>89</sup>

In the risk management step, CARB reviews emission sources of an identified TAC to determine whether regulatory action is needed to reduce risk. Based on the results of that review, CARB has promulgated a number of ATCMs, both for mobile and stationary sources. As discussed above, in 2004, CARB adopted an ATCM to limit heavy-duty diesel motor vehicle idling in order to reduce public exposure to DPM and other TACs. The measure applies to diesel-fueled commercial vehicles with gross vehicle weight ratings greater than 10,000 pounds that are licensed to operate

<sup>85</sup> CARB, Advanced Clean Trucks Regulation. <https://ww3.arb.ca.gov/regact/2019/act2019/fro2.pdf>. Accessed April 2021.

<sup>86</sup> CARB, Advanced Clean Trucks, <https://ww2.arb.ca.gov/our-work/programs/advanced-clean-trucks>. Accessed January 2021.

<sup>87</sup> JD Supra 2020. A First Look at California’s Executive Order Banning Fuel-Burning Vehicles and Imposing Other Greenhouse Gas Reducing Restrictions, <https://www.jdsupra.com/legalnews/a-first-look-at-california-s-executive-17672/>. Accessed January 2021.

<sup>88</sup> SCAQMD, Final Environmental Assessment for: Proposed Amended Rule 307.1 – Alternative Fees for Air Toxics Emissions Inventory; Proposed Amended Rule 1401 – New Source Review of Toxic Air Contaminants; Proposed Amended Rule 1402 – Control of Toxic Air Contaminants from Existing Sources; SCAQMD Public Notification Procedures for Facilities Under the Air Toxics “Hot Spots” Information and Assessment Act (AB 2588) and Rule 1402.

<sup>89</sup> SCAQMD Guidelines for Participating in the Rule 1402 Voluntary Risk, page 2-23, September 2016, [http://www.aqmd.gov/docs/default-source/ceqa/documents/aqmd-projects/2016/final-ea\\_par-307-1\\_1401\\_1402.pdf?sfvrsn=4](http://www.aqmd.gov/docs/default-source/ceqa/documents/aqmd-projects/2016/final-ea_par-307-1_1401_1402.pdf?sfvrsn=4). Accessed January 2022.

on highways, regardless of where they are registered. This measure does not allow diesel-fueled commercial vehicles to idle for more than five minutes at any given time.

In addition to limiting exhaust from idling trucks, as discussed above, CARB promulgated emission standards for off-road diesel construction equipment such as bulldozers, loaders, backhoes, and forklifts, as well as many other self-propelled off-road diesel vehicles. The regulation, adopted by CARB on July 26, 2007, aims to reduce emissions by the installation of diesel particulate filters and encouraging the replacement of older, dirtier engines with newer emission controlled models. Implementation is staggered based on fleet size, with the largest operators beginning compliance in 2014.

The AB 1807 program is supplemented by the AB 2588 Air Toxics “Hot Spots” program, which was established by the California Legislature in 1987. Under this program, facilities are required to report their air toxics emissions, assess health risks, and notify nearby residents and workers of significant risks if present. In 1992, the AB 2588 program was amended by Senate Bill (SB) 1731 to require facilities that pose a significant health risk to the community to reduce their risk through implementation of a risk management plan.

## 2.3 Regional

### South Coast Air Quality Management District (SCAQMD)

The SCAQMD is primarily responsible for planning, implementing, and enforcing air quality standards for the South Coast Air Basin (Air Basin) which includes all of Orange County, Los Angeles County (excluding the Antelope Valley portion), the western, non-desert portion of San Bernardino County, and the western Coachella Valley and San Gorgonio Pass portions of Riverside County. The Air Basin is an approximately 6,745-square-mile area bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east. The Air Basin is a subregion within the western portion of the SCAQMD jurisdiction. While air quality in the Air Basin has improved, the Air Basin requires continued diligence to meet the air quality standards. While air quality in the Air Basin has improved, the Air Basin requires continued diligence to meet the air quality standards.

### Air Quality Management Plan

The SCAQMD has adopted AQMPs to meet the CAAQS and NAAQS. Most recently, SCAQMD has initiated the development of the 2022 AQMP to address the attainment of the 2015 8-hour ozone standard (70 part per billion [ppb]) for the Air Basin and Coachella Valley. The Air Basin is classified as an “extreme” non-attainment area and the Coachella Valley is classified as a “severe-15” non-attainment area for the 2015 Ozone NAAQS. In 2021, SCAQMD and CARB established Mobile Source Working Groups to support the development of mobile source strategies. SCAQMD also established Residential and Commercial Buildings Working Groups to support the development of control measures.

The SCAQMD Governing Board adopted the 2016 AQMP on March 3, 2017.<sup>90</sup> CARB approved the 2016 AQMP on March 23, 2017.<sup>91</sup> Key elements of the 2016 AQMP include implementing fair-share emissions reductions strategies at the federal, State, and local levels; establishing partnerships, funding, and incentives to accelerate deployment of zero and near-zero-emissions technologies; and taking credit from co-benefits from greenhouse gas, energy, transportation and other planning efforts.<sup>92</sup> The strategies included in the 2016 AQMP build on the strategies from the previous 2012 AQMP and are intended to demonstrate attainment of the NAAQS, which are set at levels considered safe to protect public health, including the health of sensitive populations such as asthmatics, children, and the elderly with a margin of safety; and to protect public welfare, including against decreased visibility and damage to animals, crops, vegetation, and buildings,<sup>93</sup> for the federal non-attainment pollutants ozone and PM<sub>2.5</sub> while accounting for regional growth, increasing development, and maintaining a healthy economy.<sup>94</sup> In general, SCAQMD's criteria for evaluating control strategies for stationary and mobile sources is based on the following: (1) cost-effectiveness; (2) emissions reduction potential; (3) enforceability; (4) legal authority; (5) public acceptability; (6) rate of emission reduction; and (7) technological feasibility.

Control strategies in the AQMP with potential applicability to reducing short-term emissions from construction activities associated with the Project include strategies denoted in the 2016 AQMP as MOB-08 and MOB-10, which are intended to reduce emissions from on-road and off-road heavy-duty vehicles and equipment.<sup>95</sup> Descriptions of measures MOB-08 and MOB-10 are provided below:

- **MOB-08 – Accelerated Retirement of Older On-Road Heavy-Duty Vehicles:** This measure seeks to replace up to 2,000 heavy-duty vehicles per year with newer or new vehicles that at a minimum, meet the 2010 on-road heavy-duty NO<sub>x</sub> exhaust emissions standard of 0.2 grams per brake horsepower-hour (g/bhp-hr).
- **MOB-10 – Extension of the SOON Provision for Construction/Industrial Equipment:** This measure continues the Surplus Off-Road Option for NO<sub>x</sub> (SOON) provision of the statewide In-Use Off-Road Fleet Vehicle Regulation through the 2031 timeframe.

## SCAQMD Air Quality Guidance Documents

The SCAQMD published the *CEQA Air Quality Handbook* to provide local governments with guidance for analyzing and mitigating project-specific air quality impacts.<sup>96</sup> The *CEQA Air Quality Handbook* provides standards, methodologies, and procedures for conducting air quality analyses in EIRs and was used extensively in the preparation of this analysis. However, the SCAQMD is currently in the process of replacing the *CEQA Air Quality Handbook* with the *Air*

<sup>90</sup> SCAQMD, 2016 AQMP, March 2017.

<sup>91</sup> CARB, News Release - CARB establishes next generation of emission controls needed to improve state's air quality, <https://ww2.arb.ca.gov/news/carb-establishes-next-generation-emission-controls-needed-improve-states-air-quality>. Accessed June 2021.

<sup>92</sup> SCAQMD, 2016 AQMP, March 2017.

<sup>93</sup> USEPA, NAAQS Table, <https://www.epa.gov/criteria-air-pollutants/naaqs-table>. Accessed January 2022.

<sup>94</sup> SCAQMD, NAAQS/CAAQS and Attainment Status for South Coast Air Basin, 2016.

<sup>95</sup> SCAQMD, 2016 AQMP, March 2017.

<sup>96</sup> SCAQMD, CEQA Air Quality Handbook 1993, [http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/ceqa-air-quality-handbook-\(1993\)](http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/ceqa-air-quality-handbook-(1993)). Accessed January 2022.

*Quality Analysis Guidance Handbook*. While this process is underway, the SCAQMD recommends using other approved models to calculate emissions from land use projects, such as the CalEEMod software, which is a model developed for California Air Pollution Control Officers Association (CAPCOA) in collaboration with the California Air Districts, which is a Statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant and GHG emissions from a variety of land use projects.

The SCAQMD has also adopted land use planning guidelines in its *Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning*, which considers impacts to sensitive receptors from facilities that emit TAC emissions.<sup>97</sup> SCAQMD's general land use siting distance recommendations are the same as those provided by CARB (e.g., a 500-foot siting distance for sensitive land uses proposed in proximity to freeways and high-traffic roads, a 1,000-foot siting distance for sensitive land uses proposed in proximity to a major service and maintenance rail yard, and the same siting criteria for distribution centers and dry cleaning facilities). The SCAQMD's document introduces land use-related policies that rely on design and distance parameters to minimize emissions and lower potential health risk. SCAQMD's guidelines are voluntary initiatives recommended for consideration by local planning agencies.

The SCAQMD has published a guidance document called the *Final Localized Significance Threshold Methodology* for CEQA Evaluations that is intended to provide guidance when evaluating the localized effects from mass emissions during construction.<sup>98</sup> The SCAQMD adopted additional guidance regarding PM<sub>2.5</sub> emissions in a document called *Final Methodology to Calculate Particulate Matter (PM)<sub>2.5</sub> and PM<sub>2.5</sub> Significance Thresholds*.<sup>99</sup> This latter document has been incorporated by the SCAQMD into its CEQA significance thresholds and *Final Localized Significance Threshold Methodology*.

SCAQMD has adopted two rules to limit cancer and non-cancer health risks from facilities located within its jurisdiction. Rule 1401 (New Source Review of Toxic Air Contaminants) regulates new or modified facilities, and Rule 1402 (Control of Toxic Air Contaminants from Existing Sources) regulates facilities that are already operating. Rule 1402 incorporates the requirements of the AB 2588 program, including implementation of risk reduction plans for significant risk facilities.

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<sup>97</sup> SCAQMD, *Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning*, 2005, <http://www.aqmd.gov/docs/default-source/planning/air-quality-guidance/complete-guidance-document.pdf?sfvrsn=4>. Accessed January 2022.

<sup>98</sup> SCAQMD, *Final Localized Significance Threshold Methodology*, 2008, <http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/localized-significance-thresholds>. Accessed May 2021.

<sup>99</sup> SCAQMD, *Final Methodology to Calculate Particulate Matter (PM)<sub>2.5</sub> and PM<sub>2.5</sub> Significance Thresholds*, 2006, <http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/pm-2-5-significance-thresholds-and-calculation-methodology>. Accessed May 2021.

## SCAQMD Rules and Regulations

The SCAQMD has adopted many rules and regulations to regulate sources of air pollution in the Air Basin and to help achieve air quality standards. The Project may be subject to the following SCAQMD rules and regulations:

**Regulation IV – Prohibitions:** This regulation sets forth the restrictions for visible emissions, odor nuisance, fugitive dust, various air emissions, fuel contaminants, start-up/shutdown exemptions and breakdown events. The following is a list of rules which apply to the Project:

**Rule 401 – Visible Emissions:** This rule states that a person shall not discharge into the atmosphere from any single source of emission whatsoever any air contaminant for a period or periods aggregating more than three minutes in any one hour which is as dark or darker in shade as that designated No. 1 on the Ringelmann Chart or of such opacity as to obscure an observer's view.

**Rule 402 – Nuisance:** This rule states that 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.

**Rule 403 – Fugitive Dust:** This rule requires projects to prevent, reduce or mitigate fugitive dust emissions from a site. Rule 403 restricts visible fugitive dust to the project property line, restricts the net PM<sub>10</sub> emissions to less than 50 micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ) and restricts the tracking out of bulk materials onto public roads. Additionally, projects must utilize one or more of the best available control measures (identified in the tables within the rule). Control measures may include adding freeboard to haul vehicles, covering loose material on haul vehicles, watering or using non-toxic chemical stabilizers to prevent the generation of visible dust plumes, limiting vehicle speeds to 15 miles per hour on unpaved surfaces, and/or ceasing all activities. Finally, a contingency plan may be required if so determined by USEPA.

**Regulation XI – Source Specific Standards:** Regulation XI sets emissions standards for specific sources. The following is a list of rules which may apply to the Project:

**Rule 1113 – Architectural Coatings:** This rule requires manufacturers, distributors, and end users of architectural and industrial maintenance coatings to reduce VOC emissions from the use of these coatings, primarily by placing limits on the VOC content of various coating categories.

**Rule 1138 – Control of Emissions from Restaurant Operations:** This rule specifies PM and VOC emissions and odor control requirements for commercial cooking operations that use chain-driven charbroilers to cook meat.

**Rule 1146.1 – Emissions of Oxides of Nitrogen from Small Industrial, Institutional, and Commercial Boilers, Steam Generators, and Process Heaters:** This rule requires manufacturers, distributors, retailers, refurbishers, installers, and operators of new and existing units to reduce NO<sub>x</sub> emissions from natural gas-fired boilers, steam generators, and process heaters as defined in this rule.



**Rule 1146.2 – Emissions of Oxides of Nitrogen from Large Water Heaters and Small Boilers and Process Heaters:** This rule requires manufacturers, distributors, retailers, refurbishers, installers, and operators of new and existing units to reduce NO<sub>x</sub> emissions from natural gas-fired water heaters, boilers, and process heaters as defined in this rule.

**Rule 1186 – PM10 Emissions from Paved and Unpaved Roads, and Livestock Operations:** This rule applies to owners and operators of paved and unpaved roads and livestock operations. The rule is intended to reduce PM10 emissions by requiring the cleanup of material deposited onto paved roads, use of certified street sweeping equipment, and treatment of high-use unpaved roads (see also Rule 403).

**Regulation XIV – Toxics and Other Non-Criteria Pollutants:** Regulation XIV sets requirements for new permit units, relocations, or modifications to existing permit units which emit toxic air contaminants or other non-criteria pollutants.

**Rule 1403 – Asbestos Emissions from Demolition/Renovation Activities:** This rule requires owners and operators of any demolition or renovation activity and the associated disturbance of asbestos-containing materials, any asbestos storage facility, or any active waste disposal site to implement work practice requirements to limit asbestos emissions from building demolition and renovation activities, including the removal and associated disturbance of asbestos-containing materials.

**Rule 1470 – Requirements for Stationary Diesel-Fueled Internal Combustion and Other Compression Ignition Engines:** This rule applies to stationary compression ignition (CI) engines greater than 50 brake horsepower, such as emergency generators, and sets limits on emissions and operating hours. In general, new stationary emergency standby diesel-fueled engines greater than 50 brake horsepower are not permitted to operate more than 50 hours per year for maintenance and testing.

## Southern California Association of Governments

SCAG is the regional planning agency for Los Angeles, Orange, Ventura, Riverside, San Bernardino and Imperial Counties, and addresses regional issues relating to transportation, the economy, community development and the environment. SCAG is the federally designated Metropolitan Planning Organization (MPO) for the majority of the Southern California region and is the largest MPO in the nation.

Pursuant to Health & Safety Code Section 40460, SCAG is responsible for preparing and approving the portions of the AQMP relating to regional demographic projections and integrated regional land use, housing, employment and transportation programs, measures and strategies.<sup>100</sup> With regard to air quality planning, SCAG adopted the *2016-2040 Regional Transportation Plan/Sustainable Communities Strategy* (2016-2040 RTP/SCS) in April 2016, which contains such regional development and growth forecasts. These regional development and growth forecasts form the basis for the land use and transportation control portions of the 2016 AQMP, and its growth forecasts were utilized in the preparation of the air quality forecasts and consistency analysis included in the 2016 AQMP.<sup>101</sup> Both the RTP/SCS and the AQMP are based

<sup>100</sup> SCAQMD, 2016 AQMP, page 4-42.

<sup>101</sup> SCAQMD, 2016 AQMP, page 4-42.

on projections that originate with local jurisdictions. On September 3, 2020, the SCAG Regional Council adopted the 2020-2045 *Regional Transportation Plan/Sustainable Communities Strategy* (2020-2045 RTP/SCS), which is an update to the previous 2016-2040 RTP/SCS.<sup>102</sup>

SCAG is required to adopt an SCS along with its RTP pursuant to Senate Bill (SB) 375 (Chapter 728, Statutes of 2008), which required the development of regional targets for reducing passenger vehicle GHG emissions. Under SB 375, CARB is required, in consultation with the state's MPOs, to set regional GHG reduction targets for the passenger vehicle and light-duty truck sector for 2020 and 2035. In February 2011, CARB adopted the final GHG emissions reduction targets for SCAG, within whose jurisdiction the City of Culver City is located. SCAG's target is a per capita reduction of 8 percent for 2020 and 13 percent for 2035 compared to the 2005 baseline.<sup>103</sup> SCAG's 2016-2040 RTP/SCS meets or exceeds these targets, lowering GHG emissions (below 2005 levels) by eight percent by 2020; 18 percent by 2035; and 21 percent by 2040.<sup>104</sup> The 2020-2045 RTP/SCS includes the CARB updated SB 375 targets from March 2018 to require 8 percent reduction by 2020 and a 19 percent reduction by 2035 in per capita passenger vehicle GHG emissions.<sup>105</sup> Although the RTP/SCS is not focused specifically on air quality emissions, the targets growth projections established in the 2016-2040 RTP/SCS, as incorporated in the 2016 AQMP affect air quality through optimized land use planning and the consequential reduction of emissions from passenger and light-duty vehicles.

SCAG's SCS is "built on a foundation of contributions from communities, cities, counties and other local agencies" and "based on local general plans as well as input from local governments."<sup>106</sup> SCAG's 2016-2040 RTP/SCS and 2020-2045 RTP/SCS provide specific strategies for implementation. These strategies include supporting projects that encourage a diverse job opportunities for a variety of skills and education, recreation and cultures and a full-range of shopping, entertainment and services all within a relatively short distance; encouraging employment development around current and planned transit stations and neighborhood commercial centers; encouraging the implementation of a "Complete Streets" policy that meets the needs of all users of the streets, roads and highways including bicyclists, children, persons with disabilities, motorists, electric vehicles, movers of commercial goods, pedestrians, users of public transportation, and seniors; and supporting alternative fueled vehicles.<sup>107</sup> Like the 2016-2040 RTP/SCS, the 2020-2045 RTP/SCS overall land use pattern reinforces the trend of focusing new development and employment in the region's high quality transit areas (HQTAs), which SCAG defines as an area within a one-half mile of a well-serviced transit stop.<sup>108</sup> HQTAs are a cornerstone of land use planning best practice in the SCAG region because they concentrate roadway repair investments, leverage transit and active transportation investments, reduce

<sup>102</sup> Southern California Association of Governments (SCAG), 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (2020-2045 RTP/SCS), May 2020.

<sup>103</sup> Southern California Association of Governments (SCAG), 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (2016 RTP/SCS), 2016, page 8, <http://scagrtpscs.net/Documents/2016/final/f2016RTPSCS.pdf>. Accessed January 2022.

<sup>104</sup> SCAG, 2016 RTP/SCS, page 153.

<sup>105</sup> CARB, SB 375 Regional Greenhouse Gas Emissions Reduction Targets.

<sup>106</sup> SCAG, 2016 RTP/SCS, page 75.

<sup>107</sup> SCAG, 2025-2040 RTP/SCS, May 2020, pages 48-86.

<sup>108</sup> SCAG, 2020-2045 RTP/SCS, May 2020, page 51.

regional life cycle infrastructure costs, improve accessibility, create local jobs, and have the potential to improve public health and availability of community amenities.

## 2.4 Local

Local jurisdictions, such as the City of Culver City (City), have the authority and responsibility to reduce air pollution through its police power and decision-making authority. The City reviews project plans for consistency with environmental regulations and other conditions applicable to proposed development. The City is also responsible for the implementation of transportation control measures as outlined in the AQMP. Examples of such measures include bus turnouts, energy-efficient streetlights, and synchronized traffic signals. In accordance with CEQA, the City has the authority to obtain input from other local agencies and may consult with any person with special expertise relating to the Project environmental impacts to assess air quality impacts of new development projects. If significant impacts are found, the City has the authority to require mitigation of potentially significant air quality impacts by conditioning discretionary permits and monitors and enforces implementation of such mitigation measures.

The City's General Plan was originally adopted in 1995 and is periodically amended as the City grows in population and physical development. The current General Plan does not have an Air Quality Element. However, the Circulation Element of the General Plan contains objectives and policies focused on public transit (Objective #2), bikeways (Objective #3), pedestrian access (Objective #4), participating in regional system improvements (Implementation Measure #1), and roadway improvement (Implementation Measure #2). Consistency with these goals and policies have the potential to reduce single occupancy vehicle trips and vehicle miles traveled (VMT), thus reducing air pollutants from mobile sources. The growth projections within the General Plan inform the development of SCAQMD's AQMP.

In 2009, the City adopted the Green Building program which contains a number of features that would indirectly reduce air pollution emissions through features such as enhanced building insulation, low-flow fixtures, efficient lighting and heating, ventilation and air conditioning systems.

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## SECTION 3

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# Thresholds of Significance

The significance thresholds below are derived from the Environmental Checklist question in Appendix G of the *State CEQA Guidelines*. Accordingly, a significant air quality impact would occur if the Project would:

- a) **Conflict with or obstruct implementation of the applicable air quality plan;**
- 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;**
- c) **Expose sensitive receptors to substantial pollutant concentrations; or**
- d) **Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.**

Pursuant to the State CEQA Guidelines (Section 15064.7), a lead agency may consider using, when available, the significance criteria established by the applicable air quality management district or air pollution control district when making determinations of significance. The Project would be under the SCAQMD's jurisdiction. SCAQMD has established air quality significance thresholds in its *CEQA Air Quality Handbook*. These thresholds are based on the recognition that the Air Basin is a distinct geographic area with a critical air pollution problem for which ambient air quality standards have been promulgated to protect public health.<sup>109</sup> The potential air quality impacts of the Project are, therefore, evaluated according to the most recent thresholds adopted by the SCAQMD in connection with its *CEQA Air Quality Handbook*, *Air Quality Analysis Guidance Handbook*, and subsequent SCAQMD guidance as discussed previously.<sup>110</sup> As stated above, the SCAQMD has stated that these thresholds are based on the recognition that the Air Basin is a distinct geographic area with a critical air pollution problem for which ambient air quality standards have been promulgated to protect public health.<sup>111</sup>

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<sup>109</sup> South Coast Air Quality Management District, *CEQA Air Quality Handbook* (1993) 6-2.

<sup>110</sup> While the SCAQMD *CEQA Air Quality Handbook* contains significance thresholds for lead, Project construction and operation would not include sources of lead emissions and would not exceed the established thresholds for lead. Unleaded fuel and unleaded paints have virtually eliminated lead emissions from commercial and residential land use projects such as the Project. As a result, lead emissions are not further evaluated.

<sup>111</sup> SCAQMD, *CEQA Air Quality Handbook*, page 6-2.

### 3.1 Consistency with Air Quality Plans and Policies

The Project would have a significant impact if it would:

- Substantially conflict with or obstruct implementation of relevant air quality policies in the AQMP or the General Plan or other adopted regional and local plans adopted for reducing air quality impacts.

Evaluating whether the Project would conflict with or obstruct implementation of the applicable air quality plan is based on consistency with applicable control measures and policies adopted for the purpose of reducing air pollutant emissions and associated impacts.

### 3.2 Construction Emissions

Based on the most recently adopted significance thresholds in the SCAQMD *CEQA Air Quality Handbook*, the Project would potentially cause or contribute to an exceedance of an air quality standard if the following would occur:

- Regional construction emissions from both direct and indirect sources would exceed any of the following SCAQMD prescribed daily regional emissions thresholds:<sup>112</sup>
  - 75 pounds a day for VOC;
  - 100 pounds per day for NO<sub>x</sub>;
  - 550 pounds per day for CO;
  - 150 pounds per day for SO<sub>2</sub>;
  - 150 pounds per day for PM<sub>10</sub>; or
  - 55 pounds per day for PM<sub>2.5</sub>.

In addition, the SCAQMD has developed a methodology to assess the potential for localized emissions to cause an exceedance of applicable ambient air quality standards or ambient concentration limits. Impacts would be considered significant if the following would occur:

- Maximum daily localized emissions of NO<sub>x</sub> and/or CO during construction are greater than the applicable localized significance thresholds, resulting in predicted ambient concentrations in the vicinity of the Project Site greater than the most stringent ambient air quality standards for NO<sub>2</sub> and/or CO.<sup>113</sup>
- Maximum daily localized emissions of PM<sub>10</sub> and/or PM<sub>2.5</sub> during construction are greater than the applicable localized significance thresholds, resulting in predicted ambient concentrations in the vicinity of the Project Site to exceed 10.4 µg/m<sup>3</sup> over 24 hours (SCAQMD Rule 403 control requirement).

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<sup>112</sup> South Coast Air Quality Management District, SCAQMD Air Quality Significance Thresholds, (March 2015), <http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf?sfvrsn=2>. Accessed January 2022.

<sup>113</sup> South Coast Air Quality Management District, Final Localized Significance Threshold Methodology, (2008). Available: <http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/localized-significance-thresholds>. Accessed January 2022.

As discussed previously, the SCAQMD has established screening criteria that can be used to determine the maximum allowable daily emissions that would satisfy the localized significance thresholds and therefore not cause or contribute to an exceedance of the applicable ambient air quality standards or ambient concentration limits without Project-specific dispersion modeling. This analysis uses these screening criteria to evaluate potential impacts from the Project's localized construction emissions. A detailed discussion of the Project's construction phasing and equipment list is available in **Exhibit A** of this Technical Report.

### 3.3 Operational Emissions

The significance thresholds of significance, below, are the most recently adopted indicators in the SCAQMD *CEQA Air Quality Handbook* for determining the significance of operational emissions. The SCAQMD has established numerical indicators as significance thresholds based, in part, on Section 182(e) of the CAA, which sets 10 tons per year of VOC as a significance level for stationary source emissions in extreme non-attainment areas for ozone.<sup>114</sup> As shown in Table 4, the Air Basin is designated as extreme non-attainment for ozone. The SCAQMD converted this significance level to pounds per day for ozone precursor emissions (10 tons per year  $\times$  2,000 pounds per ton  $\div$  365 days per year = 55 pounds per day). The significance thresholds for other pollutants are also based on federal stationary source significance levels. SCAQMD's numeric emission indicators are based on the recognition that the Air Basin is a distinct geographic area with a critical air pollution problem for which ambient air quality standards have been promulgated to protect public health.<sup>115</sup> Based on the indicators in the SCAQMD *CEQA Air Quality Handbook*, the Project would potentially cause or contribute to an exceedance of an air quality standard if the following would occur:

- Regional operational emissions exceed any of the following SCAQMD prescribed daily regional emissions thresholds:<sup>116</sup>
  - 55 pounds a day for VOC;
  - 55 pounds per day for NO<sub>x</sub>;
  - 550 pounds per day for CO;
  - 150 pounds per day for SO<sub>2</sub>;
  - 150 pounds per day for PM<sub>10</sub>; or
  - 55 pounds per day for PM<sub>2.5</sub>.

<sup>114</sup> SCAQMD, CEQA Air Quality Handbook, page 6-1.

<sup>115</sup> SCAQMD, CEQA Air Quality Handbook, page 6-2.

<sup>116</sup> South Coast Air Quality Management District, SCAQMD Air Quality Significance Thresholds, (March 2015), <http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf?sfvrsn=2>. Accessed January 2022.

In addition, the SCAQMD has developed a methodology to assess the potential for localized emissions to cause an exceedance of applicable ambient air quality standards. Impacts would be considered significant if the following were to occur:

- Maximum daily localized emissions of NO<sub>x</sub> and/or CO during operation are greater than the applicable localized significance thresholds, resulting in predicted ambient concentrations in the vicinity of the project site greater than the most stringent ambient air quality standards for NO<sub>2</sub> and/or CO.<sup>117</sup>
- Maximum daily localized emissions of PM<sub>10</sub> and/or PM<sub>2.5</sub> during operation are greater than the applicable localized significance thresholds, resulting in predicted ambient concentrations in the vicinity of the project site to exceed 2.5 µg/m<sup>3</sup> over 24 hours (SCAQMD Rule 1303 allowable change in concentration).

As discussed previously, the SCAQMD has established screening criteria that can be used to determine the maximum allowable daily emissions that would satisfy the localized significance thresholds and therefore not cause or contribute to an exceedance of the applicable ambient air quality standards or ambient concentration limits without Project-specific dispersion modeling. This analysis used the screening criteria to evaluate impacts from the Project's localized operational emissions.

### 3.4 Carbon Monoxide Hotspots

With respect to the formation of CO hotspots, Project impacts would be considered significant if the following were to occur:

- The Project would cause or contribute to an exceedance of the CAAQS one-hour or eight-hour CO standards of 20 or 9.0 ppm, respectively within one-quarter mile of a sensitive receptor.<sup>118</sup>

### 3.5 Toxic Air Contaminants

Based on criteria set forth by the SCAQMD, the Project would expose sensitive receptors to substantial concentrations of toxic air contaminants if any of the following were to occur:<sup>119</sup>

- The Project would expose sensitive receptors to substantial concentrations of TACs if it emits carcinogenic materials or TACs that exceed the maximum incremental cancer risk of 10 in one million or a cancer burden greater than 0.5 excess cancer cases (in areas greater than or equal to one in one million) or an acute or chronic hazard index of 1.0.

As discussed further below in subsection 4, *Methodology*, construction impacts from TACs are evaluated quantitatively in a construction HRA due to the use of heavy-duty, diesel equipment.

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<sup>117</sup> Ibid.

<sup>118</sup> The CAAQS are more conservative than the NAAQS (35 ppm for one-hour CO and 9.0 ppm for eight-hour CO).

<sup>119</sup> South Coast Air Quality Management District, CEQA Air Quality Handbook, Chapter 6 (Determining the Air Quality Significance of a Project) and Chapter 10 (Assessing Toxic Air Pollutants), (1993); SCAQMD Air Quality Significance Thresholds, (March 2011), <http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf?sfvrsn=2>. Accessed January 2022.



For operations, the impacts are analyzed qualitatively due to the limited and minimal sources of TACs associated with operation of the proposed land uses.

### **3.6 Other Emissions (Such as Odors)**

With respect to other emissions such as those leading to odors, the Project would be considered significant if it created other emissions such as objectionable odors affecting a substantial number of people.

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# SECTION 4

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## Methodology

The methodology to evaluate potential impacts to regional and local air quality that may result from the construction and long-term operations of the Project is described below, with detailed modeling calculations provided in **Exhibit B** of this Technical Report.

### 4.1 Consistency with Air Quality Plan

The SCAQMD is required, pursuant to the CAA, to reduce emissions of criteria pollutants for which the Air Basin is in non-attainment of the NAAQS (e.g., ozone and PM<sub>2.5</sub>).<sup>120</sup> The SCAQMD's 2016 AQMP contains a comprehensive list of pollution control strategies directed at reducing emissions and achieving NAAQS related to these pollutants, including transportation control strategies from SCAG's 2016-2040 RTP/SCS designed to reduce VMT.<sup>121</sup> The 2016 AQMP control strategies were developed, in part, based on regional growth projections prepared by SCAG.<sup>122</sup> For this reason, projects whose growth is consistent with the assumptions used in the 2016 AQMP will be deemed to be consistent with the 2016 AQMP because their growth has already been included in the growth projections utilized in the formulation of the control strategies in the 2016 AQMP. Thus, emissions from projects, uses, and activities that are consistent with the applicable growth projections and control strategies used in the development of the 2016 AQMP would not jeopardize attainment of the air pollutant reduction goals identified in the AQMP even if their emissions exceed the SCAQMD's thresholds of significance.<sup>123</sup> As noted above, the 2016 AQMP has been adopted by the SCAQMD and CARB. Therefore, this analysis considers consistency of the Project with the 2016 AQMP based on the AQMP's consistency with applicable growth projections and emission control strategies.

### 4.2 Existing Site Emissions

Existing operational emissions were estimated using CalEEMod, as described above. For mobile sources, the vehicle trips were obtained for the existing uses from the Project's traffic study.<sup>124</sup>

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<sup>120</sup> The Los Angeles County portion of the Air Basin is designated as nonattainment for the federal lead standard; however, this was due to localized emissions from two lead-acid battery recycling facilities in the City of Vernon and the City of Industry that are no longer operating. For reference see South Coast Air Quality Management District, Board Meeting, Agenda No. 30, Adopt the 2012 Lead State Implementation Plan for Los Angeles County, May 4, 2012.

<sup>121</sup> SCAQMD, Air Quality Management Plan (AQMP), 2016, page ES-6, 4-42.

<sup>122</sup> SCAQMD, AQMP, page 4-42 to 4-44.

<sup>123</sup> SCAQMD, CEQA Air Quality Handbook, April 1993, page 12-1.

<sup>124</sup> Gibson Transportation Consulting, Inc., Transportation Study for 8631 Hayden Place, 2022.

Emissions from on-site natural gas combustion were based on usage data from the California Energy Commissions (CEC) *California Commercial End Use Survey* (CEUS), which lists energy demand by building type.<sup>125</sup> Since 1978, the CEC has established building energy efficiency standards, which are updated periodically. The CEUS provides data on a limited statewide basis for different climate zones.

Other sources of emissions from existing uses include equipment used to maintain landscaping, such as lawnmowers and trimmers. The CalEEMod software uses landscaping equipment emission factors from the CARB off-road (OFFROAD) emissions factor model and the CARB *Technical Memo: Change in Population and Activity Factors for Lawn and Garden Equipment* (6/13/2003).<sup>126</sup> The CalEEMod software assumes that landscaping equipment operates for 250 days per year in the Air Basin. Fugitive VOC emissions are based on consumer product usage factors provided by the SCAQMD within CalEEMod and architectural coating emission factors based on SCAQMD Rule 1113.

### 4.3 Construction Emissions

Construction of the Project has the potential to generate temporary criteria pollutant emissions through the use of heavy-duty construction equipment, such as excavators, and through vehicle trips generated from workers and haul trucks traveling to and from the Project Site. In addition, fugitive dust emissions would result from demolition and various soil-handling activities. Mobile source emissions, primarily NO<sub>x</sub>, would result from the use of construction equipment such as loaders. Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of construction activity, and prevailing weather conditions. The assessment of construction air quality impacts considers each of these potential sources.

Daily regional emissions during construction are forecasted by assuming a conservative estimate of construction activities (i.e., assuming all construction occurs at the earliest feasible date) and applying the mobile source and fugitive dust emissions factors. The emissions have been estimated using the CalEEMod software, an emissions inventory software program recommended by the SCAQMD, and the most recent version of CARB's on-road vehicle emissions factor model (EMFAC2021). Construction phasing would include demolition, site preparation, grading and excavation, draining, utilities and trenching, foundations/concrete pour, building construction and exterior finishes, and paving and landscaping.

The input values used in this analysis were adjusted to be Project-specific based on equipment types and the construction schedule. Haul truck trip estimates were based on information obtained from the Applicant. Worker trip and vendor truck trip estimates were based on calculation methodologies in CalEEMod. Emissions from on-road vehicles (i.e. haul trucks, material vendors, and worker vehicles) were estimated outside of CalEEMod. CalEEMod is based on outputs from the CARB OFFROAD and on-road emissions factor EMFAC models, which are emissions

<sup>125</sup> California Energy Commission, California Commercial End-Use Survey, <http://capabilities.itron.com/CeusWeb/Chart.aspx>. Accessed November 2018.

<sup>126</sup> CARB, OFFROAD Modeling Change Technical Memo: Change in Population and Activity Factors for Lawn and Garden Equipment, June 13, 2003, [http://www.arb.ca.gov/msei/2001\\_residential\\_lawn\\_and\\_garden\\_changes\\_in\\_eqpt\\_pop\\_and\\_act.pdf](http://www.arb.ca.gov/msei/2001_residential_lawn_and_garden_changes_in_eqpt_pop_and_act.pdf). Accessed May 2021.

estimation models developed by CARB and used to calculate emissions from construction activities, including on- and off-road vehicles. These values were applied to the construction phasing assumptions used in the criteria pollutant analysis to generate criteria pollutant emissions values for each construction activity. Within CalEEMod, fugitive dust emissions include the application of water as a control measure consistent with SCAQMD Rule 403, which applies to the Project's construction activities. Fugitive dust control measures are not mitigation under CEQA because they are regulatory compliance.

The Project would export approximately 170,000 cubic yards (cy) of soil during the grading/excavation phase in addition to the 2,500 cy of building demolition debris and 300 cy of hardscape. Emissions from Project construction activities were estimated based on the construction phase in which the activity would be occurring. Heavy-duty equipment, vendor supply trucks and concrete trucks would be used during construction of foundations, parking structures, and buildings. The maximum daily regional emissions from these activities are estimated by construction phase and compared to the SCAQMD significance thresholds. The maximum daily regional emissions are predicted values for the worst-case day and do not represent the emissions that would occur for every day of Project construction.

The localized effects from the on-site portion of construction emissions are evaluated at nearby sensitive receptor locations potentially impacted by the Project according to the SCAQMD's Localized Significance Threshold Methodology.<sup>127</sup> The localized significance thresholds are only applicable to NO<sub>x</sub>, CO, PM<sub>10</sub>, and PM<sub>2.5</sub>. The SCAQMD has established screening criteria for projects that disturb five acres or less that can be used to determine the maximum allowable daily emissions that would satisfy the localized significance thresholds and therefore not cause or contribute to an exceedance of the applicable ambient air quality standards without project-specific dispersion modeling. The localized analysis is based on this SCAQMD screening criteria. The screening criteria depend on: (1) the area in which the Project is located SRA, (2) the size of the Project Site, and (3) the distance between the Project Site and the nearest sensitive receptor. The Project Site is located in the SCAQMD SRA 2 and could disturb up to approximately 2 acres on a given day. The nearest off-site air quality sensitive receptors include the residences located approximately 75 feet north of the Project Site. The maximum net daily emissions from construction of the Project were compared to the screening levels from SRA 2 with sensitive receptors located within 25 meters of the Project Site.

As stated above, fugitive dust emissions would result from demolition and various soil-handling activities during construction of the Project. Construction contractors are required to comply with the applicable provision of SCAQMD Rule 403 (Fugitive Dust). As discussed in Section 2.3 above, SCAQMD Rule 403 requires construction activities to control fugitive dust emissions during construction by complying with best available control measures, such as ensuring sufficient freeboard height for haul vehicles, covering loose material on haul vehicles, applying water or non-toxic soil stabilizers in sufficient quantities to prevent the generation of visible dust plumes on disturbed or unpaved road surfaces, and limiting vehicle speeds to 15 miles per hour

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<sup>127</sup> South Coast Air Quality Management District, Localized Significance Thresholds, (2003, revised 2008), <http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/localized-significance-thresholds>. Accessed May 2021.

on unpaved surfaces. Applicable fugitive dust control measures are incorporated into the construction emissions modeling within the SCAQMD-approved CalEEMod software.

Project construction is anticipated to commence in 2023 and require up to 18 months. If construction commences at a later date, construction emissions would be lower than those estimated in this Technical Report due to the use of a more energy-efficient and cleaner burning construction vehicle fleet mix, pursuant to State regulations that require vehicle fleet operators to phase-in less polluting trucks. As a result, should Project construction commence at a later date than analyzed in this Technical Report, air quality impacts would be lower than the impacts disclosed herein.

### 4.3 Operational Emissions

Operation of the Project has the potential to generate criteria pollutant emissions through vehicle trips traveling to and from the Project Site. In addition, emissions would result from on-site sources such as natural gas combustion, landscaping equipment, and use of consumer products. Operational impacts were assessed for the Project buildout year (i.e., as early as 2024 assuming construction begins at the earliest possible time in 2023).

The Project's operational emissions are also estimated using the CalEEMod software. CalEEMod was used to forecast the Project's daily regional emissions from area and energy sources that would occur during long-term Project operations. Mobile source emissions were estimated based on CARB's EMFAC2021 to generate Air Basin-specific vehicle fleet emission factors in units of pounds per mile, and daily trip rates from the Project's traffic study.<sup>128</sup>

Area source emissions, including landscaping equipment and consumer products, such as solvents used in non-industrial applications which emit VOCs during their product use and cleaning supplies, were calculated using the CalEEMod software. Energy source emissions are based on natural gas combustion (building heating and water heaters). Natural gas usage factors in CalEEMod are based on the CEUS data set, which provides energy demand by building type and climate zone.<sup>129</sup> Additionally, the Project conservatively assumes a charbroiler (for the commissary should one be included) and a 1,275-kilowatt emergency generator. Operational emissions modeling conservatively assumes the emergency generator would run a maximum of 50 hours annually for emergencies and for a maximum of 2 hours during a day when maintenance occurs.

Operational air quality impacts are assessed based on the incremental increase in emissions compared to baseline conditions. As discussed previously, the Project Site is currently developed with a two-story building which is currently in use and has existing operational emissions as shown in Table 1, *Existing Site Operational Emissions*. Therefore, the Project's operational emissions analysis subtracts the existing site's emissions to estimate the total net new emissions

<sup>128</sup> Gibson Transportation Consulting, Inc., Transportation Study for 8631 Hayden Place, 2022

<sup>129</sup> California Energy Commission, California Commercial End-Use Survey, <http://capabilities.itron.com/CeusWeb/Chart.aspx>. Accessed January 2022.

from the Project. The maximum daily net emissions from operation of the Project are compared to the SCAQMD daily regional significance thresholds.

The localized effects from the on-site portion of the maximum daily net emissions from Project operation were evaluated at the nearby sensitive receptor locations that would be potentially impacted by Project operations).<sup>130</sup> The localized impacts from operation of the Project were assessed similar to the construction emissions, as discussed previously. Detailed emissions calculations are provided in Exhibit B.

The greatest quantities of CO are produced from motor vehicle combustion and are usually concentrated at or near ground level as they do not readily disperse into the atmosphere, particularly under cool, stable (i.e., low or no wind) atmospheric conditions. Localized areas where ambient concentrations exceed State and/or federal standards are termed “CO hotspots.” The potential for the Project to cause or contribute to the formation of off-site CO hotspots was evaluated based on prior dispersion modeling of the four busiest intersections in the Air Basin that the SCAQMD conducted for its CO Attainment Demonstration Plan in the AQMP. The analysis compares the intersections with the greatest peak-hour traffic volumes that would be impacted by the Project to the intersections modeled by the SCAQMD. Project-impacted intersections with peak-hour traffic volumes that would be lower than the intersections modeled by the SCAQMD, in conjunction with lower background CO levels, would result in lower overall CO concentrations as compared to the SCAQMD-modeled values to maintain attainment status in its AQMP.

## 4.4 Toxic Air Contaminants (TACs)

The greatest potential for TAC emissions during construction would be related to DPM emissions associated with heavy-duty equipment during excavation and grading activities. Construction activities associated with the Project would be sporadic, transitory, and short-term in nature (approximately 18 months).

During long-term operations, TACs could be emitted as part of periodic maintenance operations, from routine cleaning, from periodic painting, etc., and from periodic visits from delivery trucks and service vehicles, and from maintenance and testing of the emergency generator. However, these events are expected to be occasional and result in minimal emissions exposure to off-site sensitive receptors. As the Project consists only of office uses, the Project would not include sources of substantial TAC emissions identified by the SCAQMD or CARB siting recommendations.<sup>131, 132</sup>

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<sup>130</sup> SCAQMD, Final Localized Significance Threshold Methodology.

<sup>131</sup> SCAQMD, Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning, 2005, Table 2-3.

<sup>132</sup> CARB, Air Quality and Land Use Handbook: A Community Health Perspective, 2005, Table 1-1.

Due to the short duration of construction, TACs are evaluated qualitatively. For operations, the impacts are analyzed qualitatively due to the limited and minimal sources of TACs associated with operation of the proposed land uses.



# SECTION 5

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## Environmental Impacts

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**Threshold a)** Would the project conflict with or obstruct the implementation of the applicable air quality plan?

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**Impact Statement: Implementation of the Project would not conflict with or obstruct implementation of the applicable air quality plan. (*Less than Significant*)**

### 5.1 Consistency with Applicable Air Quality Plan

The following analysis addresses the Project's consistency with applicable SCAQMD and SCAG policies, inclusive of regulatory compliance. In accordance with SCAQMD's *CEQA Air Quality Handbook*, the following criteria are required to be addressed to determine the Project's consistency with applicable SCAQMD and SCAG policies.

- Criterion 1: Will the Project result in any of the following:
  - An increase in the frequency or severity of existing air quality violations; or
  - Cause or contribute to new air quality violations; or
  - Delay timely attainment of air quality standards or the interim emission reductions specified in the AQMP.
- Criterion 2: Will the Project exceed the assumptions utilized in preparing the AQMP?

#### Criterion 1

Under Criterion 1, localized concentrations of NO<sub>2</sub> as NO<sub>x</sub>, CO, PM<sub>10</sub>, and PM<sub>2.5</sub> have been analyzed for the Project. SO<sub>2</sub> emissions would be negligible during construction and long-term operations and, therefore, would not have the potential to cause or effect a violation of the SO<sub>2</sub> ambient air quality standard. Since VOCs are not a criteria pollutant, there is no ambient standard or localized threshold for VOCs. However, due to the role VOCs play in ozone formation, it is classified as a precursor pollutant, and only a regional emissions threshold has been established.

The Project's NO<sub>x</sub>, CO, PM<sub>10</sub>, and PM<sub>2.5</sub> emissions during construction and operations were analyzed: (1) to ascertain potential effects on localized concentrations; and (2) to determine if there is a potential for such emissions to cause or effect a violation of the ambient air quality standards for NO<sub>2</sub>, CO, PM<sub>10</sub>, and PM<sub>2.5</sub>. As shown in Table 7, the increases in localized emissions of NO<sub>2</sub>, CO, PM<sub>10</sub>, and PM<sub>2.5</sub> during construction would not exceed the SCAQMD-recommended localized significance thresholds at sensitive receptors in proximity to the Project Site. As shown in Table 8, the increases in localized emissions of NO<sub>x</sub>, CO, PM<sub>10</sub>, and PM<sub>2.5</sub>

emissions during operation of the Project would not exceed the SCAQMD-recommended localized significance thresholds at sensitive receptors in proximity to the Project Site.

The Project would not introduce any substantial stationary sources of emissions; therefore, CO is the appropriate benchmark pollutant for assessing local area air quality impacts from post-construction motor vehicle operations.<sup>133</sup> As indicated below in Threshold 3, no intersections would result in a CO hotspot in excess of the ambient air quality standards, and impacts would be less than significant. Therefore, the Project would not increase the frequency or severity of an existing CO violation or cause or contribute to new CO violations.

Therefore, in response to Criterion 1, the Project would not increase the frequency or severity of an existing violation or cause or contribute to new violations for ozone. **Impacts regarding the timely attainment of air quality standards or interim emission reductions specified in the AQMP and impacts would be less than significant.**

## Criterion 2

With respect to the second criterion for determining consistency with AQMP growth assumptions, the projections in the AQMP for achieving air quality goals are based on assumptions in SCAG's 2016-2040 RTP/SCS regarding population, housing, and growth trends. Determining whether or not a project exceeds the assumptions reflected in the AQMP involves the evaluation of consistency with applicable population, housing, and employment growth projections and appropriate incorporation of AQMP control measures. The following discussion provides an analysis with respect to these criteria.

### Air Quality Management Plan Consistency

The Project is located within the Air Basin, which is under the jurisdiction of the SCAQMD. As such, SCAQMD's 2016 AQMP is the applicable air quality plan for the Project. The 2016 AQMP relies on emissions forecasts based on the demographic and economic growth projections provided by SCAG's 2016-2040 RTP/SCS in devising its control strategies for reducing emissions of ozone and PM<sub>2.5</sub> to meet five NAAQS standards.<sup>134</sup> SCAG is charged by California law to prepare and approve "the portions of each AQMP relating to demographic projections and integrated regional land use, housing, employment, and transportation programs, measures and strategies."<sup>135</sup> The SCAQMD recommends that, when determining whether a project is consistent with the current AQMP, the lead agency assess whether the project would directly obstruct implementation of the plan by impeding the SCAQMD's efforts to achieve attainment with respect to any criteria pollutant for which it is currently not in attainment of the NAAQS and CAAQS (e.g., ozone, PM<sub>10</sub>, and PM<sub>2.5</sub>) and whether it is consistent with the demographic and economic assumptions (typically land use related, such as employment and population/residential

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<sup>133</sup> SCAQMD, CEQA Air Quality Handbook, Chapter 12, Assessing Consistency with Applicable Regional Plans, April 1993.

<sup>134</sup> SCAQMD, 2016 AQMP, pages ES-6, 3-1, 3-3, 3-10, 3-17.

<sup>135</sup> SCAQMD, 2016 AQMP, page 4-42.

units) upon which the plan is based.<sup>136</sup> Projects whose growth is included in the projections used in the formulation of the AQMP are considered to be consistent with the plan and not to interfere with its attainment.<sup>137</sup>

Project construction and operations would not obstruct implementation of the 2016 AQMP as the Project would comply with applicable required fleet rules and control strategies to reduce on-road truck emissions (i.e., 13 CCR, Section 2025 [CARB Truck and Bus regulation]), and other applicable SCAQMD rules specified and incorporated in the 2016 AQMP. As discussed in Section 4.0, *Methodology*, projects, uses, and activities are consistent with the applicable growth projections and control strategies used in the development of the 2016 AQMP and would not jeopardize attainment of the air quality levels identified in the 2016 AQMP. As discussed below, compliance with the applicable required fleet rules and control strategies and requirements would render it consistent with, and meet or exceed, the 2016 AQMP requirements for control strategies intended to reduce emissions from construction equipment and activities. Thus, the Project's criteria pollutant emissions would not cause the Air Basin's criteria pollutant emissions to worsen so as to impede the SCAQMD's efforts to achieve attainment with respect to any criteria pollutant for which it is currently not in attainment of the NAAQS and CAAQS (e.g., ozone, PM10, and PM2.5),<sup>138</sup> or to cause the Air Basin to deteriorate from its current attainment status with respect to any other criteria pollutant emissions.

As further discussed below, the Project is also consistent with the 2016 AQMP. The Project incorporates into its design appropriate control strategies set forth in the 2016 AQMP for achieving its emission reduction goals, and would be consistent with the demographic and economic assumptions upon which the plan is based.

## **Construction**

### **Control Strategies**

During its construction phase, the Project would ensure compliance with CARB's requirements to minimize short-term emissions from on-road and off-road diesel equipment, and with SCAQMD's regulations such as Rule 403 for controlling fugitive dust and Rule 1113 for controlling VOC emissions from architectural coatings. Furthermore, the Project would utilize off-road diesel equipment greater than 50 hp that meet USEPA Tier 3 off-road emission standards. Compliance with these features and requirements would be consistent with and meets or exceeds the AQMP requirements for control strategies intended to reduce emissions from construction equipment and activities.

<sup>136</sup> SCAQMD, Air Quality Analysis Handbook, 1993, pages 12-2, 12-3, <http://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook>.

<sup>137</sup> SCAQMD, CEQA Air Quality Handbook, page 12-1.

<sup>138</sup> The Los Angeles County portion of the Air Basin is designated as nonattainment for the federal lead standard; however, this was due to localized emissions from two lead-acid battery recycling facilities in the City of Vernon and the City of Industry that are no longer operating. For reference see South Coast Air Quality Management District, Board Meeting, Agenda No. 30, Adopt the 2012 Lead State Implementation Plan for Los Angeles County, May 4, 2012.

## **Growth Projections**

The Project would generate short-term construction jobs, but these jobs would not necessarily bring new construction workers or their families into the region, since construction workers are typically drawn from an existing regional pool who travel among construction sites within the region. Construction workers are not typically brought from other regions to work on developments such as the Project. Moreover, these jobs would be relatively small in number and temporary in nature. Therefore, the Project's construction jobs would not conflict with the long-term employment or population projections upon which the 2016 AQMP is based.

## **Operations**

### **Control Strategies and Policy Consistency**

The Project design and land uses render it consistent with the 2016 AQMP during operations. As discussed above, the 2016 AQMP includes transportation control strategies from the 2016-2040 RTP/SCS that are intended to reduce VMT and resulting regional mobile source emissions. The majority of these strategies are to be implemented by cities, counties, and other regional agencies such as SCAG and SCAQMD, although some can be furthered by individual development projects.

The Project location, design, and land uses would support land use and transportation control strategies related to reducing vehicle trips for people working and visiting the Project by increasing office density near public transit. The Project is considered an "urban infill" project, as it further develops existing low density property within an already developed urban area. The Project is accessible to and well served by public transit including frequent and comprehensive transit services, and thus, the project and job growth, as a result of the Project, would be located in an HQTAs, which SCAG defines as an area within a one-half mile of a well-served transit stop. Specifically, the Project Site is located approximately 0.43 miles southeast of the Los Angeles County Metropolitan Transportation Authority (Metro) "E" Line Station, which provides the Project Site with regional access to Downtown Los Angeles and Santa Monica. In addition, there are multiple regional and local bus lines that run along National and Washington Boulevards. This analysis provides evidence of the Project's consistency with the 2016 AQMP's goal of reducing mobile source emissions as a source of NO<sub>x</sub> and PM<sub>2.5</sub>.

As described above, by locating new office uses within an area that has existing high quality public transit (with access to existing local bus and rail service), housing, retail, and restaurants, all within walking distance, and by including features that support and encourage pedestrian activity and other non-vehicular transportation and increased transit use in Culver City, the Project would reduce vehicle trips and VMT, and resulting air pollutant emissions.

## **Growth Projections**

The Project is anticipated to be fully operational in 2024. The Project's growth would be consistent with the growth projections contained in the 2016-2040 RTP/SCS. The Project would increase employees by approximately 695 but would comprise a negligible portion of the City's total employment, which was estimated at 44,100 in 2012 and projected to reach 53,000 in

2040.<sup>139,140</sup> As such, the Project would have a very small effect on the overall employment projections for the City. Therefore, the increases in employment would be consistent with SCAG’s 2016-2040 RTP/SCS goals and would be consistent with the growth projections contained in SCAG’s 2016-2040 RTP/SCS, which form the basis of the growth projections in the 2016 AQMP.

As discussed above under Methodology, projects, uses, and activities that are consistent with the applicable growth projections and control strategies used in the development of the AQMP would not jeopardize attainment of the air quality reductions identified in the AQMP.<sup>141</sup> **The Project would be consistent with the growth projections in the 2016 AQMP, since the growth would occur in a High Quality Transit Area, resulting in highly transportation-efficient growth, which would minimize increases in transportation-related emissions. Impacts would be less than significant.**

### City’s General Plan

Although the City’s General Plan does not have an Air Quality Element, the project would be consistent with other elements of the General Plan. The Project Site is currently zoned as “IG” Industrial General. According to the Culver City Municipal Code (CCMC), Chapter 17.230, the IG zoning designation permits industrial, manufacturing and processing uses; some recreation and education uses; retail uses; and service uses (including offices and storage facilities). As previously discussed, the Project would be replacing an existing industrial building and surface parking lot with associated landscaping and would develop an approximately 244,000 square foot office building with subterranean parking that would be consistent with the current zoning designation. Furthermore, the Project would not conflict with the Circulation Element of the General Plan. The Project is committed to providing pedestrian access to nearby commercial and residential. Furthermore, as discussed previously, the project is located close proximity of various public transit stops. **As such, the Project would be consistent with and not conflict with the General Plan and impacts would be less than significant.**

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**Threshold b)** Would the project 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?

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**Impact Statement: Implementation of the Project would not 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. (Less than Significant)**

<sup>139</sup> LAUSD, 2020 Developer Fee Justification Study, Los Angeles School District, March 2020.

<sup>140</sup> SCAG 2016-2040 RTP/SCS Appendix: Demographics & Growth Forecast; [https://scag.ca.gov/sites/main/files/file-attachments/f2016rtpscs\\_demographicsgrowthforecast.pdf?1606073557](https://scag.ca.gov/sites/main/files/file-attachments/f2016rtpscs_demographicsgrowthforecast.pdf?1606073557)

<sup>141</sup> SCAQMD, CEQA Air Quality Handbook, page 12-1.

## 5.2 Cumulatively Considerable Non-Attainment Pollutants

The Project would contribute to local and regional air pollutant emissions during construction (short-term or temporary) and occupancy (long-term). Based on the following analysis, construction would result in less than significant impacts relative to the maximum daily emissions as compared to the SCAQMD regional significance thresholds for construction criteria air pollutant emissions in which the region is non-attainment under the CAAQS or NAAQS (i.e., ozone precursors of VOCs and NO<sub>x</sub>, PM10, and PM2.5). Operation of the Project would result in less than significant impacts relative to the maximum daily emissions as compared to the SCAQMD regional significance thresholds for operational criteria air pollutant emissions in which the region is non-attainment under the CAAQS or NAAQS (i.e., ozone precursors of VOCs and NO<sub>x</sub>, PM10, and PM2.5). As shown below, construction and operational emissions would not exceed the SCAQMD regional significance thresholds for attainment, maintenance, or unclassifiable criteria air pollutants (i.e., CO and SO<sub>2</sub>).

### Construction Emissions

Construction of the Project has the potential to generate temporary regional criteria pollutant emissions through the use of heavy-duty construction equipment, such as backhoes and forklifts, through vehicle trips generated by workers and haul trucks traveling to and from the Project Site, and through building activities such as the application of paint and other surface coatings. In addition, fugitive dust emissions would result from demolition and various soil-handling activities. Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of construction activity, and prevailing weather conditions.

The maximum daily construction emissions for the Project were estimated for each construction phase. The maximum daily emissions are predicted values for a representative worst-case day, and do not represent the actual emissions that would occur for every day of construction, which would likely be lower on many days. As stated above, in order to provide a conservative emissions analysis, for modeling purposes, construction emissions were modeled beginning in 2023. Detailed emissions calculations are provided in Exhibit B of this Technical Report.

The results of the criteria pollutant calculations are presented in **Table 5, *Estimated Maximum Unmitigated Regional Construction Emissions***. As previously stated, within CalEEMod, fugitive dust emissions include the application of water as a control measure consistent with SCAQMD Rule 403. Therefore, emissions include dust control measures as required by SCAQMD Rule 403 (Control of Fugitive Dust). Emissions also include fugitive VOC control measures to be implemented by architectural coating emission factors required by SCAQMD Rule 1113 (Architectural Coatings). In addition, the Project has committed to use off-road diesel construction equipment greater than 50 hp to meet the USEPA Tier 3 off-road emission standards. As shown in Table 5, construction-related daily emissions would not exceed the SCAQMD numeric indicators of significance and emissions levels would be below the applicable numeric indicators. **As the Project's maximum regional emissions from construction would**

be below the regional numeric indicators, regional construction emissions impacts would be less than significant.

**TABLE 5**  
**ESTIMATED MAXIMUM UNMITIGATED REGIONAL CONSTRUCTION EMISSIONS (POUNDS PER DAY)<sup>a</sup>**

Construction Phases	VOC	NO <sub>x</sub>	CO	SO <sub>2</sub>	PM10 <sup>b</sup>	PM2.5 <sup>b</sup>
3.2 Demolition - 2023	1	30	34	<1	3	2
3.3 Site Preparation - 2023	<1	16	18	<1	1	1
3.4 Grading - 2023	1	45	41	<1	4	2
3.5 Drainage/Utilities/Trenching - 2023	<1	34	27	<1	3	2
3.6 Foundations/Concrete Pour - 2023	<1	16	17	<1	2	1
3.7 Exterior Construction - 2023	<1	15	19	<1	2	1
3.7 Exterior Construction - 2024	<1	15	19	<1	2	1
3.8 Interior Construction - 2023	1	18	25	<1	2	1
3.8 Interior Construction - 2024	1	18	25	<1	2	1
3.9 Paving - 2024	30	3	5	<1	<1	<1
<b>Overlapping Phases</b>						
Site Preparation & Grading/Excavation & Drainage/Utilities/Trenching	2	72	73	<1	6	4
Grading/Excavation & Drainage/Utilities/Trenching	1	56	55	<1	4	3
Exterior Construction & Interior Construction -2023	1	33	44	<1	3	2
Exterior Construction & Interior Construction -2024	1	33	43	<1	3	2
Interior Construction & Paving/Landscaping	30	21	30	<1	2	1
<b>Maximum Daily Construction Emissions<sup>c</sup></b>	<b>30</b>	<b>72</b>	<b>73</b>	<b>&lt;1</b>	<b>6</b>	<b>4</b>
SCAQMD Regional Significance Threshold	75	100	550	150	150	55
<b>Exceeds Threshold?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>

NOTES:

<sup>a</sup> Totals may not add up exactly due to rounding in the modeling calculations. Detailed emissions calculations are provided in Exhibit B.

<sup>b</sup> Emissions include fugitive dust control measures consistent with SCAQMD Rule 403.

SOURCE: ESA 2022

## Operational Emissions

Operational criteria pollutant emissions were calculated for mobile, area, and stationary sources (such as the conservatively assumed a charbroiler and emergency generator) for the Project operational year, 2024. Operations would adhere to the applicable codes including 2019 Title 24 Green Building Code. Operational emission estimates include compliance with SCAQMD Rule 1113 (Architectural Coatings), which limits the VOC content of architectural coatings. Detailed emissions calculations are provided in Exhibit B of this Technical Report.

Daily trip generation rates and VMT for the Project were provided by the Project's traffic study and include trips associated with the proposed offices uses.<sup>142</sup> Natural gas usage factors are based on recreational and retail data from the CEC, and landscape equipment emissions are based on off-road emission factors from CARB. Emissions from the use of consumer products and the reapplication of architectural coatings are based on data provided in CalEEMod. As discussed previously, operational emissions are reduced based on the estimated operational emissions of the existing uses on the Project Site.

The results of the regional criteria pollutant emission calculations for VOC, NO<sub>x</sub>, CO, SO<sub>2</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> are presented in **Table 6, Estimated Maximum Unmitigated Regional Operational Emissions**. The Project's operational-related daily emissions would not exceed the SCAQMD numeric indicators for any criteria pollutants. **As the Project's maximum regional emissions from operational activities would be below the regional numeric indicators, regional construction emissions impacts would be less than significant.**

**TABLE 6**  
**ESTIMATED MAXIMUM UNMITIGATED REGIONAL OPERATIONAL EMISSIONS (POUNDS PER DAY)<sup>a</sup>**

Source	VOC	NO <sub>x</sub>	CO	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
Area (Consumer Products, Landscaping)	6	<1	<1	<1	<1	<1
Energy (Natural Gas)	<1	<1	<1	<1	<1	<1
Mobile Vehicles	8	6	81	<1	6	1
Stationary Source (i.e., Emergency Generator and Charbroiler)	1	25	15	<1	<1	<1
<b>Project Maximum Daily Operational Emissions</b>	15	32	96	<1	6	2
Existing Site Emissions Removed	2	<1	7	<1	<1	<1
<b>Net Maximum Regional Operational Emissions</b>	13	31	90	<1	6	1
SCAQMD Significance Threshold	55	55	550	150	150	55
<b>Exceeds Thresholds?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>

<sup>a</sup> Totals may not add up exactly due to rounding in the modeling calculations.

SOURCE: ESA 2022

## Cumulative Impacts

The SCAQMD's approach for assessing cumulative impacts related to operations or long-term implementation is based on attainment of ambient air quality standards in accordance with the requirements of the CAA and California Clean Air Act. As discussed earlier, the SCAQMD has developed a comprehensive plan, the AQMP, which addresses the region's cumulative air quality condition.

A significant impact may occur if a project would add a cumulatively considerable contribution of a federal or California non-attainment pollutant. Because the Los Angeles County portion of

<sup>142</sup> Gibson Transportation Consulting, Inc., Transportation Study for 8631 Hayden Place, 2022.



the Air Basin is currently in non-attainment for ozone, NO<sub>2</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>, cumulative projects could exceed an air quality standard or contribute to an existing or projected air quality exceedance. Cumulative impacts to air quality are evaluated under two sets of thresholds for CEQA and the SCAQMD. In particular, Section 15064(h)(3) of the CEQA Guidelines provides guidance in determining the significance of cumulative impacts. Specifically, Section 15064(h)(3) states in part that:

*A lead agency may determine that a project's incremental contribution to a cumulative effect is not cumulatively considerable if the project will comply with the requirements in a previously approved plan or mitigation program which provides specific requirements that will avoid or substantially lessen the cumulative problem (e.g., water quality control plan, air quality plan, integrated waste management plan) within the geographic area in which the project is located. Such plans or programs must be specified in law or adopted by the public agency with jurisdiction over the affected resources through a public review process to implement, interpret, or make specific the law enforced or administered by the public agency.*

For purposes of the cumulative air quality analysis with respect to CEQA Guidelines Section 15064(h)(3), the Project's incremental contribution to cumulative air quality impacts is determined based on compliance with the SCAQMD adopted the AQMP. As discussed above in Threshold 1 the Project would not conflict with or obstruct implementation of AQMP and would be consistent with the growth projections in the AQMP.

Nonetheless, SCAQMD no longer recommends relying solely upon consistency with the AQMP as an appropriate methodology for assessing cumulative air quality impacts. The SCAQMD recommends that project-specific air quality impacts be used to determine the potential cumulative impacts to regional air quality. As shown in **Table 6**, the Project's regional emissions would be below SCAQMD significance thresholds. In particular, non-attainment pollutant emissions of ozone precursors and particulate matter would not exceed the SCAQMD significance thresholds. The formation of ground-level ozone is a complex process due to photochemical reactions of precursor pollutants (i.e., VOC and NO<sub>x</sub> emissions) in the atmosphere in the presence of sunlight. Meteorological factors, such as wind, would result in dispersive effects of pollutants, including ozone precursor and particulate matter emissions, that are dispersed horizontally downwind and through vertical mixing. It is unlikely that the Project's emissions, which would not exceed the SCAQMD significance thresholds, would result in a substantial measurable increase in the respective pollutant concentrations in the Air Basin to a degree that clearly predictable and identifiable health impacts would specifically result from this Project's emissions. **Therefore, the Project's incremental contribution to long-term emissions of non-attainment pollutants and ozone precursors, considered together with cumulative projects, would not be cumulatively considerable, and therefore the cumulative impact of the Project would be less than significant.**

**Threshold c)** Expose sensitive receptors to substantial pollutant concentrations.

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**Impact Statement: Implementation of the Project would not expose sensitive receptors to substantial pollutant concentrations. (Less than Significant)**

## 5.3 Substantial Pollutant Concentrations

### Localized Construction Emissions

As explained above, the localized construction air quality analysis was conducted using the methodology prescribed in the SCAQMD *Final Localized Significance Threshold Methodology*.<sup>143</sup> The maximum daily localized emissions for each of the construction phases and the localized significance thresholds are presented in **Table 7, *Estimated Maximum Unmitigated Localized Construction Emissions***. The same phasing, equipment assumptions, and compliance with SCAQMD Rule 403 and Rule 1113, were used as for the regional emissions calculations discussed above. As shown in Table 7, maximum localized construction emissions for sensitive receptors would be below the localized screening indicators for NO<sub>x</sub>, CO, PM<sub>10</sub>, and PM<sub>2.5</sub>, therefore, with respect to localized construction emissions, impacts to sensitive receptors would not be potentially significant. **As the Project's maximum localized construction emissions would not exceed the localized numeric indicators for NO<sub>x</sub>, CO, PM<sub>10</sub>, and PM<sub>2.5</sub>, its construction emissions impacts to sensitive receptors would be less than significant.**

### Localized Operational Emissions

The screening criteria provided in the Localized Significance Threshold Methodology were used to determine the localized operational emissions numerical indicators of significance for the Project. The same assumptions, including compliance with the 2019 Title 24 building energy efficiency standards, and 2019 CALGreen Code, were used in the analysis. The maximum daily localized emissions and the localized significance thresholds are presented in **Table 8, *Estimated Maximum Unmitigated Localized Operational Emissions***. **As the Project's maximum localized operational emissions would not exceed the localized numeric indicators for NO<sub>x</sub>, CO, PM<sub>10</sub>, or PM<sub>2.5</sub>, operational emissions impacts to sensitive receptors would be less than significant.**

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<sup>143</sup> SCAQMD, Final Localized Significance Threshold Methodology. July 2008.

**TABLE 7**  
**ESTIMATED MAXIMUM UNMITIGATED LOCALIZED CONSTRUCTION EMISSIONS (POUNDS PER DAY)<sup>a</sup>**

<b>Construction Phases</b>	<b>NO<sub>x</sub></b>	<b>CO</b>	<b>PM10<sup>b</sup></b>	<b>PM2.5<sup>b</sup></b>
3.2 Demolition - 2023	21	28	2	2
3.3 Site Preparation - 2023	13	16	1	1
3.4 Grading - 2023	22	28	1	1
3.5 Drainage/Utilities/Trenching - 2023	10	13	1	1
3.6 Foundations/Concrete Pour - 2023	6	10	<1	<1
3.7 Exterior Construction - 2023	6	9	<1	<1
3.7 Exterior Construction - 2024	6	9	<1	<1
3.8 Interior Construction - 2023	16	21	1	1
3.8 Interior Construction - 2024	16	21	1	1
3.9 Paving - 2024	3	5	<1	<1
<b>Overlapping Phases</b>				
Site Preparation & Grading/Excavation & Drainage/Utilities/Trenching	45	57	3	3
Grading/Excavation & Drainage/Utilities/Trenching	33	41	2	2
Exterior Construction & Interior Construction -2023	22	31	2	2
Exterior Construction & Interior Construction -2024	22	31	2	2
Interior Construction & Paving/Landscaping	19	26	1	1
<b>Maximum Daily Construction Emissions</b>	<b>45</b>	<b>57</b>	<b>3</b>	<b>3</b>
SCAQMD Localized Significance Threshold	147	827	6	4
<b>Exceeds Threshold?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>
NOTES:				
<sup>a</sup> Totals may not add up exactly due to rounding in the modeling calculations. Detailed emissions calculations are provided in Exhibit B.				
<sup>b</sup> Emissions include fugitive dust control measures consistent with SCAQMD Rule 403.				
<sup>c</sup> Construction is scheduled such that no phases would overlap.				
SOURCE: ESA 2022				

**TABLE 8**  
**ESTIMATED MAXIMUM UNMITIGATED LOCALIZED OPERATIONAL EMISSIONS (POUNDS PER DAY)<sup>a</sup>**

<b>Source</b>	<b>NO<sub>x</sub></b>	<b>CO</b>	<b>PM10</b>	<b>PM2.5</b>
Area	<1	<1	<1	<1
Energy	<1	<1	<1	<1
Stationary Source (Emergency Generator and Charbroiler)	25	15	<1	<1
<b>Total Localized Project Operational Emissions</b>	<b>26</b>	<b>15</b>	<b>&lt;1</b>	<b>&lt;1</b>
Localized Existing Site Emissions Removed	1	<1	<1	<1
<b>Net Maximum Localized Operational Emissions</b>	<b>26</b>	<b>15</b>	<b>&lt;1</b>	<b>&lt;1</b>
SCAQMD Significance Threshold	147	827	2	1
<b>Exceeds Thresholds?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>

<sup>a</sup> Totals may not add up exactly due to rounding in the modeling calculations. Detailed emissions calculations are provided in Exhibit B.  
SOURCE: ESA 2022

## Carbon Monoxide Hotspots

The potential for the Project to cause or contribute to CO hotspots was evaluated by comparing Project intersections (both intersection geometry and traffic volumes) with prior studies conducted by the SCAQMD in support of their AQMPs and considering existing background CO concentrations. As discussed below, this comparison demonstrates that the Project would not cause or contribute considerably to the formation of CO hotspots, that CO concentrations at Project-impacted intersections would remain well below the threshold one-hour and eight-hour ambient air quality standards (CAAQS) of 20 or 9.0 parts per million (ppm), respectively within one-quarter mile of a sensitive receptor, and that no further CO analysis is warranted or required.

As shown previously in Table 2, CO levels in the Project Site area are substantially below the Federal and the State standards. Maximum CO levels in recent years were 2.0 ppm (one-hour average) and 1.2 ppm (eight-hour average) as compared to the criteria of 20 ppm (CAAQS one-hour average) or 35 ppm (NAAQS one-hour average) and 9.0 ppm (eight-hour average). No exceedances of the CO standards have been recorded at monitoring stations in the Air Basin for some time,<sup>144</sup> and the Air Basin is currently designated as a CO attainment area for both the CAAQS and the NAAQS.

The SCAQMD conducted CO modeling for the 2003 AQMP for the four worst-case intersections in the Air Basin. These include: (a) Wilshire Boulevard and Veteran Avenue; (b) Sunset Boulevard and Highland Avenue; (c) La Cienega Boulevard and Century Boulevard; and (d) Long Beach Boulevard and Imperial Highway. In the 2003 AQMP CO attainment demonstration, the SCAQMD notes that the intersection of Wilshire Boulevard and Veteran Avenue is the most congested intersection in Los Angeles County, with an average daily traffic volume of about 100,000 vehicles per day.<sup>145</sup> This intersection is located near the on- and off-ramps to Interstate 405 in West Los Angeles. The evidence provided in Table 4-10 of Appendix V of the 2003 AQMP shows that the peak modeled CO concentration due to vehicle emissions (i.e., excluding background concentrations) at these four intersections was 4.6 ppm (one-hour average) and 3.2 ppm (eight-hour average) at Wilshire Boulevard and Veteran Avenue.<sup>146</sup> Therefore, projects that result in traffic at any intersection of less than 100,000 vehicles per day would be considered to be less than significant.

Based on the Project's traffic study, under the Future with Project Conditions (2024), the intersection of Jefferson Boulevard and Higuera Street/Obama Boulevard would have a maximum traffic volume of approximately 8,200 average daily trips under the Project buildout scenario.<sup>147</sup> As the Project does not result in 100,000 vehicles per day at any study area intersection, this comparison demonstrates that the Project would not contribute to the formation of CO hotspots and that no further CO analysis is required. **The Project would not contribute to**

<sup>144</sup> SCAQMD, Final 2012 AQMP, page 2-22.

<sup>145</sup> SCAQMD, 2003 AQMP, Appendix V: Modeling and Attainment Demonstrations, page V-4-24.

<sup>146</sup> The eight-hour average is based on a 0.7 persistence factor, as recommended by the SCAQMD.

<sup>147</sup> Gibson Transportation Consulting, Inc., Transportation Study for 8631 Hayden Place, 2022.

**the formation of CO hotspots and no further CO analysis is required. Therefore, the Project would result in less than significant impacts with respect to CO hotspots.**

## Toxic Air Contaminants

### Construction

Temporary TAC emissions associated with DPM emissions from heavy construction equipment would occur during construction activities. According to OEHHA and the SCAQMD's Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis,<sup>148</sup> health effects from TACs are described in terms of individual cancer risk based on a lifetime (i.e., 70-year) resident exposure duration. Given the temporary and short-term construction schedule (approximately 18 months), the Project would not result in a long-term (i.e., lifetime or 70-year) exposure as a result of construction activities.

The Project would be consistent with the applicable 2016 AQMP requirements for control strategies intended to reduce emissions from construction equipment and activities. The Project would comply with regulatory control measures including the CARB Air Toxics Control Measure that limits diesel powered equipment and vehicle idling to no more than 5 minutes at a location, and the CARB In-Use Off-Road Diesel Vehicle Regulation that requires fleets to retire, replace, or repower of older, dirtier engines with newer emission-controlled models; compliance with these would minimize emissions of TACs during construction. As previously mentioned, the Project will utilize off-road diesel construction equipment greater than 50 hp to meet USEPA Tier 3 off-road emission standards. SCAQMD recommends that construction health risk assessments be conducted for substantial sources of DPM emissions (e.g., earth-moving construction activities) in proximity to sensitive receptors and has provided guidance for analyzing mobile source diesel emissions. Although, sensitive receptors (residential uses) are located to the north and west of the Project Site, localized DPM emissions (strongly correlated with PM<sub>2.5</sub> emissions) are less than significant (as shown in Table 7, above). Although the localized analysis does not directly measure health risk impacts, it does provide data that can be used to evaluate the potential to cause health risk impacts. The low level of PM<sub>2.5</sub> emissions coupled with the relatively short-term duration of construction activity anticipated at 18 months resulted in an overall low level of DPM concentrations in the project area. Furthermore, compliance with the aforementioned CARB ATCM anti-idling measure further minimizes DPM emissions in the project area. Thus, although there are sensitive receptors within 25 meters of the Project Site, compliance with regulatory control measures and the limited duration of construction activities would minimize exposures.

**Thus, construction activities would not expose sensitive receptors to substantial toxic air contaminant concentrations, and construction-related health impacts would be less than significant.**

<sup>148</sup> SCAQMD, Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis, August 2003, <http://www.aqmd.gov/docs/default-source/ceqa/handbook/mobile-source-toxics-analysis.doc?sfvrsn=2>.

## Operation

The SCAQMD recommends that operational health risk assessments be conducted for substantial sources of operational DPM (e.g., truck stops and warehouse distribution facilities that generate more than 100 trucks per day or more than 40 trucks with operating transport refrigeration units) and has provided guidance for analyzing mobile source diesel emissions.<sup>149</sup> The Project does not consist of any of these land uses. With implementation of the Project, two truck loading and unloading parking spaces would be provided. Thus, the Project is not anticipated to generate a substantial number of daily truck trips. As previously discussed, trucks would be subject to the five-minute regulatory idling limitation and would project trucks would be required to comply with the applicable provisions of the CARB 13 CCR, Section 2025 (Truck and Bus regulation) to minimize and reduce PM and NO<sub>x</sub> emissions from existing diesel trucks. Therefore, Project operations would not be considered a substantial source of diesel particulates.

Other sources of hazardous TACS include industrial manufacturing processes and automotive repair facilities. The Project would not include any of these potential sources, although minimal emissions may result from the use of consumer products (e.g., aerosol sprays). With respect to the use of consumer products and architectural coatings, the office uses associated with the Project would be expected to generate minimal emissions from these sources. The Project's office land uses would not include installation of industrial-sized paint booths or require extensive use of commercial or household cleaning products.

Project operations would only result in minimal emissions of TAC from maintenance or other ongoing activities, such as from the maintenance and testing of the emergency generator and use of architectural coatings and other products. As previously stated, the emergency generator which would be operated for a maximum of 50 hours annually and a maximum of 2 hours per day for maintenance activities and would be required to comply with SCAQMD Rule 1470 (Requirements for Stationary Diesel-Fueled Internal Combustion and Other Compression Ignition Engines). Based on the uses expected on the Project Site, potential long-term operational impacts associated with the release of TACs would be minimal, regulated, and controlled, and would not be expected to exceed the SCAQMD numerical indicator of significance.

**Thus, operation of the Project would not expose sensitive receptors to substantial toxic air contaminant concentrations and operational impacts would be less than significant.**

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**Threshold d)** Result in other emissions (such as those leading to odors) affecting a substantial number of people.

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**Impact Statement: Implementation of the Project would not result in other emissions (such as those leading to odors adversely affecting a substantial number of people). (Less than Significant)**

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<sup>149</sup> SCAQMD, Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis, August 2003, <http://www.aqmd.gov/docs/default-source/ceqa/handbook/mobile-source-toxics-analysis.doc?sfvrsn=2>.

## 5.4 Other Emissions (Such as Odors)

### Construction

Potential activities that may emit odors during construction include the use of architectural coatings and solvents, as well as the combustion of diesel fuel in on-and off-road equipment. SCAQMD Rule 1113 would limit the amount of VOCs in architectural coatings and solvents. In addition, the Project would comply with the applicable provisions of the CARB Air Toxics Control Measure regarding idling limitations for diesel trucks. Diesel particulate matter poses a carcinogenic health risk that is generally measured using an exposure period of 30 years for sensitive residential receptors, according to the California Environmental Protection Agency, OEHHA Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments, which was updated in 2015 with new exposure parameters including age sensitivity factors. Through mandatory compliance with SCAQMD Rules, no construction activities or materials are expected to create objectionable odors affecting a substantial number of people. Furthermore, as shown in Table 5 (regional) and Table 7 (localized), construction emissions would not exceed the SCAQMD significance thresholds for attainment, maintenance, or unclassifiable criteria air pollutants (i.e., CO and SO<sub>2</sub>). **Therefore, construction activities would result in less than significant impacts with respect to other emissions, including those leading to odors.**

### Operations

According to the SCAQMD *CEQA Air Quality Handbook*, land uses associated with odor complaints typically include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding. The Project does not include any uses identified by the SCAQMD as being associated with substantial odors. As a result, the Project is not expected to discharge contaminants into the air in quantities that would cause a nuisance, injury, or annoyance to the public or property pursuant to SCAQMD Rule 402. Furthermore, as shown in Table 6 (regional) and Table 8 (localized), daily operational emissions would not exceed the SCAQMD significance thresholds for attainment, maintenance, or unclassifiable criteria air pollutants (i.e., CO and SO<sub>2</sub>). **Therefore, operation of the Project would result in less than significant impacts with respect to other emissions, including those leading to odors.**





Exhibit A  
**Air Quality Calculations and  
Output Files**



**8631 Hayden Place**  
**Construction Assumptions**

Project Site Acreage 2.68

**Existing Project Summary**

Land Use	CalEEMod Landuse Type	Unit Amount	Size Metrics	Lot Acreage	Square Feet
General Office Building	General Office Building	8.00	1000 sqft	0.6	8,000
ParkingSpace	Parking	85.00	spaces	0.58	34,000
Studio	Light Industry	56.48	1000 sqft	1.5	56,480

**Project Summary**

Land Use	CalEEMod Landuse Type	Unit Amount	Size Metrics	Lot Acreage	Square Feet
Parking	Parking	750.00	Parking Spaces	1	310,000
General Office Building	General Office Building	245.00	1000 sqft	1	245,000
City Park	City Park	0.83	Acre	0.68	36,334
				2.68	591334

140.00 EV Parking Spaces

**Notes**

1 Land use acreage is an estimate of the total site acreage of 5 acres

**Project Description**

Location	CEC Forecasting Climate Zone	Start of Construction	Operational Year	Utility Company
Culver City	11	1-Apr-23	2024	Socal Edison

**Construction Schedule**

Phase Name	CalEEMod Phase Type	Start Date	End Date	Total Days	# of Workers per day	Total One-way Worker Trips per day	Trip Length	Vendor Trips per day	Total One-Way Vendor Trips per day	Trip Length	Total Haul Trucks	Total One-way Haul Trips	Trucks per day	Trip Length
Demolition		4/1/2023	5/1/2023	26	10	20	14.7	1	2	6.9	250	500	40	20
Site Preparation		5/1/2023	5/31/2023	27	5	10	14.7	1	2	6.9	100	200	15	20
Grading/Excavation		5/1/2023	7/1/2023	54	10	20	14.7	1	2	6.9	10800	21600	200	20
Drainage/Utilities/Trenching		5/1/2023	8/15/2023	92	10	20	14.7	1	2	6.9	6568	13136	204	20
Foundations/Concrete Pour		8/15/2023	9/1/2023	16	35	70	14.7	61	122	6.9	480	960	30	20
Structure/Exterior Construction		9/1/2023	6/1/2024	236	100	200	14.7	61	122	6.9	7080	14160	30	20
Interior Construction		10/1/2023	9/1/2024	288	65	130	14.7	1	2	6.9	2304	4608	8	20
Paving/Landscaping		7/1/2024	10/1/2024	80	25	50	14.7	1	2	6.9	320	640	4	20
Overlapping Phase														
Site Preparation & Grading/Excavation & Drainage/Utilities/Trenching						0								
Grading/Excavation & Drainage/Utilities/Trenching														
Exterior Construction & Interior Construction														
Interior Construction & Paving/Landscaping														

Generator: 1275 kW

\*Assumed based on Project Size

8631 Hayden Place

Regional Emissions

Air Quality Construction Analysis

Regional Maximums Source	ROG	NOX	CO	SO2	Total PM10	Total PM2.5
	lb/day					
3.2 Demolition - 2023	0.8	30.1	33.6	0.10	3.4	1.8
3.3 Site Preparation - 2023	0.5	16.2	18.4	0.05	1.2	1.0
3.4 Grading - 2023	1.1	45.0	41.0	0.18	3.5	1.9
3.5 Drainage/Utilities/Trenching - 2023	0.5	33.7	26.7	0.16	3.2	1.5
3.6 Foundations/Concrete Pour - 2023	0.3	15.5	16.6	0.07	1.6	0.8
3.7 Exterior Construction - 2023	0.3	15.3	18.9	0.08	1.8	0.8
3.7 Exterior Construction - 2024	0.3	15.1	18.5	0.08	1.9	0.8
3.8 Interior Construction - 2023	0.8	18.0	24.9	0.05	1.6	1.2
3.8 Interior Construction - 2024	0.8	17.9	24.7	0.05	1.6	1.2
3.9 Paving - 2024	29.6	3.4	5.4	0.01	0.4	0.3
<b>Overlapping Phases</b>						
	ROG	NOX	CO	SO2	Total PM10	Total PM2.5
Site Preparation & Grading/Excavation & Drainage/Utilities/Trenching	1.8	72.0	73.3	0.25	5.7	3.7
Grading/Excavation & Drainage/Utilities/Trenching	1.4	55.9	54.9	0.21	4.4	2.7
Exterior Construction & Interior Construction -2023	1.1	33.3	43.9	0.12	3.4	2.0
Exterior Construction & Interior Construction -2024	1.1	33.0	43.2	0.12	3.5	2.0
Interior Construction & Paving/Landscaping	30.4	21.3	30.2	0.05	1.9	1.5
<b>Project Daily Maximum Emissions</b>	<b>30</b>	<b>72</b>	<b>73</b>	<b>0</b>	<b>6</b>	<b>4</b>
SCAQMD Regional Significance Threshold	75	100	550	150	150	55
Exceeds Threshold?	No	No	No	No	No	No

8631 Hayden Place

Summer

Air Quality Construction Analysis

Summer Regional Emissions Source	Onsite Emissions lb/day						Offsite Emissions lb/day					
	ROG	NOX	CO	SO2	Total PM10	Total PM2.5	ROG	NOX	CO	SO2	Total PM10	Total PM2.5
3.2 Demolition - 2023	0.71	20.94	28.11	0.04	2.39	1.52	0.07	9.17	5.52	0.06	0.99	0.29
3.3 Site Preparation - 2023	0.42	12.69	16.23	0.03	0.85	0.86	0.03	3.47	2.14	0.02	0.38	0.11
3.4 Grading - 2023	0.93	22.14	27.82	0.04	1.13	1.14	0.15	22.81	13.18	0.14	2.41	0.71
3.5 Drainage/Utilities/Trenching - 2023	0.31	10.39	13.22	0.02	0.79	0.81	0.15	23.27	13.43	0.14	2.45	0.73
3.6 Foundations/Concrete Pour - 2023	0.19	6.14	9.57	0.01	0.48	0.49	0.10	9.40	7.06	0.06	1.08	0.30
3.7 Exterior Construction - 2023	0.12	5.67	9.32	0.01	0.46	0.47	0.15	9.60	9.60	0.07	1.38	0.35
3.7 Exterior Construction - 2024	0.13	5.86	9.35	0.01	0.47	0.48	0.13	9.21	9.17	0.06	1.38	0.35
3.8 Interior Construction - 2023	0.74	15.95	21.35	0.03	1.11	1.11	0.06	2.06	3.59	0.02	0.49	0.11
3.8 Interior Construction - 2024	0.74	15.95	21.35	0.03	1.11	1.11	0.05	1.97	3.37	0.02	0.49	0.11
3.9 Paving - 2024	29.61	3.36	4.53	0.01	0.24	0.24	0.02	0.07	0.90	0.00	0.12	0.02
<b>Regional Emissions</b>	<b>ROG</b>	<b>NOX</b>	<b>CO</b>	<b>SO2</b>	<b>Total PM10</b>	<b>Total PM2.5</b>						
3.2 Demolition - 2023	0.77	30.10	33.64	0.10	3.38	1.81						
3.3 Site Preparation - 2023	0.45	16.16	18.37	0.05	1.23	0.97						
3.4 Grading - 2023	1.08	44.96	41.00	0.18	3.53	1.86						
3.5 Drainage/Utilities/Trenching - 2023	0.46	33.66	26.65	0.16	3.25	1.54						
3.6 Foundations/Concrete Pour - 2023	0.29	15.53	16.63	0.07	1.56	0.79						
3.7 Exterior Construction - 2023	0.27	15.27	18.92	0.08	1.85	0.82						
3.7 Exterior Construction - 2024	0.27	15.07	18.52	0.08	1.85	0.83						
3.8 Interior Construction - 2023	0.80	18.01	24.94	0.05	1.60	1.22						
3.8 Interior Construction - 2024	0.79	17.91	24.72	0.05	1.60	1.22						
3.9 Paving - 2024	29.63	3.42	5.43	0.01	0.35	0.26						
<b>Overlapping Phases</b>												
	<b>ROG</b>	<b>NOX</b>	<b>CO</b>	<b>SO2</b>	<b>Total PM10</b>	<b>Total PM2.5</b>						
Site Preparation & Grading/Excavation & Drainage/Utilities/Trench	1.8	72.0	73.3	0.3	5.7	3.7						
Grading/Excavation & Drainage/Utilities/Trenching	1.4	55.9	54.9	0.2	4.4	2.7						
Exterior Construction & Interior Construction -2023	1.1	33.3	43.9	0.1	3.4	2.0						
Exterior Construction & Interior Construction -2024	1.1	33.0	43.2	0.1	3.5	2.0						
Interior Construction & Paving/Landscaping	30.4	21.3	30.2	0.1	1.9	1.5						
<b>Project Daily Maximum Emissions</b>	<b>30.42</b>	<b>72.03</b>	<b>73.26</b>	<b>0.25</b>	<b>5.66</b>	<b>3.66</b>						

8631 Hayden Place

Winter

Air Quality Construction Analysis

Winter Regional Emissions Source	Onsite Emissions						Offsite Emissions					
	ROG	NOX	CO	SO2	Total PM10	Total PM2.5	ROG	NOX	CO	SO2	Total PM10	Total PM2.5
	lb/day						lb/day					
3.2 Demolition - 2023	0.71	20.94	28.11	0.044	2.39	1.52	0.07	9.17	5.52	0.06	0.99	0.29
3.3 Site Preparation - 2023	0.42	12.69	16.23	0.026	0.85	0.86	0.03	3.47	2.14	0.02	0.38	0.11
3.4 Grading - 2023	0.93	22.14	27.82	0.044	1.13	1.14	0.15	22.81	13.18	0.14	2.41	0.71
3.5 Drainage/Utilities/Trenching - 2023	0.31	10.39	13.22	0.018	0.79	0.81	0.15	23.27	13.43	0.14	2.45	0.73
3.6 Foundations/Concrete Pour - 2023	0.19	6.14	9.57	0.013	0.48	0.49	0.10	9.40	7.06	0.06	1.08	0.30
3.7 Exterior Construction - 2023	0.12	5.67	9.32	0.012	0.464	0.47	0.15	9.60	9.60	0.07	1.38	0.35
3.7 Exterior Construction - 2024	0.13	5.86	9.35	0.012	0.47	0.48	0.13	9.21	9.17	0.06	1.38	0.35
3.8 Interior Construction - 2023	0.74	15.95	21.35	0.029	1.11	1.11	0.06	2.06	3.59	0.02	0.49	0.11
3.8 Interior Construction - 2024	0.74	15.95	21.35	0.029	1.106	1.11	0.05	1.97	3.37	0.02	0.49	0.11
3.9 Paving - 2024	29.61	3.36	4.53	0.006	0.235	0.24	0.02	0.07	0.90	0.00	0.12	0.02
Regional Emissions	ROG	NOX	CO	SO2	Total PM10	Total PM2.5						
3.2 Demolition - 2023	0.8	30.1	33.6	0.1	3.4	1.8						
3.3 Site Preparation - 2023	0.5	16.2	18.4	0.0	1.2	1.0						
3.4 Grading - 2023	1.1	45.0	41.0	0.2	3.5	1.9						
3.5 Drainage/Utilities/Trenching - 2023	0.5	33.7	26.7	0.2	3.2	1.5						
3.6 Foundations/Concrete Pour - 2023	0.3	15.5	16.6	0.1	1.6	0.8						
3.7 Exterior Construction - 2023	0.3	15.3	18.9	0.1	1.8	0.8						
3.7 Exterior Construction - 2024	0.3	15.1	18.5	0.1	1.9	0.8						
3.8 Interior Construction - 2023	0.8	18.0	24.9	0.0	1.6	1.2						
3.8 Interior Construction - 2024	0.8	17.9	24.7	0.0	1.6	1.2						
3.9 Paving - 2024	29.6	3.4	5.4	0.0	0.4	0.3						
Overlapping Phases												
	ROG	NOX	CO	SO2	Total PM10	Total PM2.5						
Site Preparation & Grading/Excavation & Drainage/Utilities/Trenching	1.8	72.0	73.3	0.3	5.7	3.7						
Grading/Excavation & Drainage/Utilities/Trenching	1.4	55.9	54.9	0.2	4.4	2.7						
Exterior Construction & Interior Construction	1.1	33.3	43.9	0.1	3.4	2.0						
Exterior Construction & Interior Construction	1.1	33.0	43.2	0.1	3.5	2.0						
Interior Construction & Paving/Landscaping	30.4	21.3	30.2	0.1	1.9	1.5						
<b>Project Daily Maximum Emissions</b>	<b>30.42</b>	<b>72.03</b>	<b>73.26</b>	<b>0.25</b>	<b>5.66</b>	<b>3.66</b>						

8631 Hayden Place

Air Quality Construction Analysis

<b>Localized Emissions</b>				
<b>Source</b>	<b>NOX</b>	<b>CO</b>	<b>Total PM10</b>	<b>Total PM2.5</b>
3.2 Demolition - 2023	20.94	28.11	2.39	1.52
3.3 Site Preparation - 2023	12.69	16.23	0.85	0.86
3.4 Grading - 2023	22.14	27.82	1.13	1.14
3.5 Drainage/Utilities/Trenching - 2023	10.39	13.22	0.79	0.81
3.6 Foundations/Concrete Pour - 2023	6.14	9.57	0.48	0.49
3.7 Exterior Construction - 2023	5.67	9.32	0.46	0.47
3.7 Exterior Construction - 2024	5.86	9.35	0.47	0.48
3.8 Interior Construction - 2023	15.95	21.35	1.11	1.11
3.8 Interior Construction - 2024	15.95	21.35	1.11	1.11
3.9 Paving - 2024	3.36	4.53	0.24	0.24
<b>Localized Emissions</b>				
<b>Source</b>	<b>NOX</b>	<b>CO</b>	<b>Total PM10</b>	<b>Total PM2.5</b>
3.2 Demolition - 2023	21	28	2	2
3.3 Site Preparation - 2023	13	16	1	1
3.4 Grading - 2023	22	28	1	1
3.5 Drainage/Utilities/Trenching - 2023	10	13	1	1
3.6 Foundations/Concrete Pour - 2023	6	10	0	0
3.7 Exterior Construction - 2023	6	9	0	0
3.7 Exterior Construction - 2024	6	9	0	0
3.8 Interior Construction - 2023	16	21	1	1
3.8 Interior Construction - 2024	16	21	1	1
3.9 Paving - 2024	3	5	0	0
<b>Overlapping Phases</b>				
	<b>NOX</b>	<b>CO</b>	<b>Total PM10</b>	<b>Total PM2.5</b>
Site Preparation & Grading/Excavation & Drainage/Utilities/Trenching	45	57	3	3
Grading/Excavation & Drainage/Utilities/Trenching	33	41	2	2
Exterior Construction & Interior Construction -2023	22	31	2	2
Exterior Construction & Interior Construction -2024	22	31	2	2
Interior Construction & Paving/Landscaping	19	26	1	1
<b>Project Daily Maximum Emissions</b>	<b>45.23</b>	<b>57.27</b>	<b>2.77</b>	<b>2.81</b>
SCAQMD LST Significance Threshold	147.0	827.0	6.0	4.0
Exceeds Threshold?	No	No	No	No

**8631 Hayden Place**  
**Total On-Road Emissions**

236 Max construction days per year

Construction Phase	Daily One-Way Trips	Haul Days per Phase (days)	Work Hours per Day (hours/day)	One-Way Trip Distance per Day (miles)	Idling per Day (minutes)
<u>Demolition</u> 2023					
Total Haul Trips	500				
Hauling	80	7	8	20	15
Vendor	1	26	8	6.9	15
Worker	10	26	8	14.7	0
					Total:
<u>Site Preparation</u> 2023					
Total Haul Trips	200				
Hauling	30	7	8	20	15
Vendor	1	27	8	6.9	15
Worker	5	27	8	14.7	0
					Total:
<u>Grading/Excavation</u> 2023					
Total Haul Trips	21600				
Hauling	200	54	8	20	15
Vendor	1	54	8	6.9	15
Worker	10	54	8	14.7	0
					Total:
<u>Drainage/Utilities/Trenching</u> 2023					
Total Haul Trips	13136				
Hauling	204	92	8	20	15
Vendor	1	92	8	6.9	15
Worker	10	92	8	14.7	0
					Total:
<u>Foundations/Concrete Pour</u> 2023					
Total Haul Trips	960				
Hauling	60	16	8	20	15
Vendor	61	16	8	6.9	15
Worker	35	16	8	14.7	0
					Total:
<u>Structure/Exterior Construction</u> 2023					
Total Haul Trips	6240				
Hauling	60	104	8	20	15
Vendor	61	104	8	6.9	15
Worker	100	104	8	14.7	0
					Total:
<u>Structure/Exterior Construction</u> 2024					
Total Haul Trips	7920				
Hauling	60	132	8	20	15
Vendor	61	132	8	6.9	15
Worker	100	132	8	14.7	0
					Total:
<u>Interior Construction</u> 2023					
Total Haul Trips	1248				
Hauling	16	78	8	20	15
Vendor	1	78	8	6.9	15
Worker	65	78	8	14.7	0
					Total:
<u>Interior Construction</u> 2024					
Total Haul Trips	3360				
Hauling	16	210	8	20	15
Vendor	1	210	8	6.9	15
Worker	65	210	8	14.7	0
					Total:
<u>Paving/Landscaping</u> 2024					
Total Haul Trips	208				
Hauling	8	26	8	20	15
Vendor	1	26	8	6.9	15
Worker	25	26	8	14.7	0



**8631 Hayden Place**  
**Total On-Road Emissions**

Construction Phase	Regional Emissions (pounds/day)										(MT/yr) Total CO2e
	ROG	NOX	CO	SO2	PM10 Dust	PM10 Exh	Total PM10	PM2.5 Dust	PM2.5 Exh	Total PM2.5	
<u>Demolition</u>											
Total Haul Trips											
Hauling	0.06	9.10	5.10	0.06	0.86	0.08	0.94	0.20	0.08	0.28	20.31
Vendor	0.00	0.04	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.31
Worker	0.01	0.03	0.39	0.00	0.05	0.00	0.05	0.01	0.00	0.01	1.22
	0.07	9.17	5.52	0.06	0.91	0.08	0.99	0.21	0.08	0.29	21.84
<u>Site Preparation</u>											
Total Haul Trips											
Hauling	0.02	3.41	1.91	0.02	0.32	0.03	0.35	0.08	0.03	0.11	7.62
Vendor	0.00	0.04	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.32
Worker	0.00	0.02	0.20	0.00	0.02	0.00	0.02	0.00	0.00	0.00	0.63
	0.03	3.47	2.14	0.02	0.35	0.03	0.38	0.08	0.03	0.11	8.57
<u>Grading/Excavation</u>											
Total Haul Trips											
Hauling	0.14	22.74	12.76	0.14	2.15	0.21	2.36	0.50	0.20	0.70	391.64
Vendor	0.00	0.04	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.64
Worker	0.01	0.03	0.39	0.00	0.05	0.00	0.05	0.01	0.00	0.01	2.54
	0.15	22.81	13.18	0.14	2.20	0.21	2.41	0.51	0.20	0.71	394.82
<u>Drainage/Utilities/Trenching</u>											
Total Haul Trips											
Hauling	0.15	23.20	13.01	0.14	2.19	0.21	2.40	0.51	0.20	0.72	680.58
Vendor	0.00	0.04	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.09
Worker	0.01	0.03	0.39	0.00	0.05	0.00	0.05	0.01	0.00	0.01	4.32
	0.15	23.27	13.43	0.14	2.24	0.21	2.45	0.52	0.21	0.73	686.00
<u>Foundations/Concrete Pour</u>											
Total Haul Trips											
Hauling	0.04	6.82	3.83	0.04	0.64	0.06	0.71	0.15	0.06	0.21	34.81
Vendor	0.03	2.47	1.87	0.01	0.20	0.02	0.21	0.04	0.02	0.06	11.60
Worker	0.03	0.11	1.37	0.00	0.16	0.00	0.16	0.03	0.00	0.03	2.63
	0.10	9.40	7.06	0.06	1.00	0.08	1.08	0.22	0.08	0.30	49.04
<u>Structure/Exterior Construction</u>											
Total Haul Trips											
Hauling	0.04	6.82	3.83	0.04	0.64	0.06	0.71	0.15	0.06	0.21	226.28
Vendor	0.03	2.47	1.87	0.01	0.20	0.02	0.21	0.04	0.02	0.06	75.39
Worker	0.07	0.30	3.91	0.01	0.46	0.01	0.46	0.08	0.01	0.08	48.87
	0.15	9.60	9.60	0.07	1.30	0.09	1.38	0.27	0.08	0.35	350.53
<u>Structure/Exterior Construction</u>											
Total Haul Trips											
Hauling	0.04	6.57	3.76	0.04	0.64	0.06	0.71	0.15	0.06	0.21	282.53
Vendor	0.03	2.37	1.81	0.01	0.20	0.02	0.21	0.04	0.02	0.06	94.27
Worker	0.06	0.27	3.60	0.01	0.46	0.01	0.46	0.08	0.01	0.08	60.51
	0.13	9.21	9.17	0.06	1.29	0.08	1.38	0.27	0.08	0.35	437.31
<u>Interior Construction</u>											
Total Haul Trips											
Hauling	0.01	1.82	1.02	0.01	0.17	0.02	0.19	0.04	0.02	0.06	45.26
Vendor	0.00	0.04	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.93
Worker	0.05	0.20	2.54	0.01	0.30	0.00	0.30	0.05	0.00	0.05	23.82
	0.06	2.06	3.59	0.02	0.47	0.02	0.49	0.09	0.02	0.11	70.01
<u>Interior Construction</u>											
Total Haul Trips											
Hauling	0.01	1.75	1.00	0.01	0.17	0.02	0.19	0.04	0.02	0.06	119.86
Vendor	0.00	0.04	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.46
Worker	0.04	0.18	2.34	0.01	0.30	0.00	0.30	0.05	0.00	0.05	62.57
	0.05	1.97	3.37	0.02	0.47	0.02	0.49	0.09	0.02	0.11	184.89
<u>Paving/Landscaping</u>											
Total Haul Trips											
Hauling	0.01	0.88	0.50	0.01	0.09	0.01	0.09	0.02	0.01	0.03	7.42
Vendor	0.00	0.04	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.30
Worker	0.02	0.07	0.90	0.00	0.11	0.00	0.12	0.02	0.00	0.02	2.98

## 8631 Hayden Place

### Total On-Road Emissions

236 Max construction days per year

Construction Phase	Daily One-Way Trips	Haul Days per Phase  (days)	Work Hours per Day  (hours/day)	One-Way Trip Distance per Day (miles)	Idling per Day (minutes)
<u>Demolition</u>					
	2023				
Total Haul Trips	500				
Hauling	80	7	8	20	15
Vendor	1	26	8	6.9	15
Worker	10	26	8	14.7	0
 <u>Site Preparation</u>					
	2023				
Total Haul Trips	200				
Hauling	30	7	8	20	15
Vendor	1	27	8	6.9	15
Worker	5	27	8	14.7	0
 <u>Grading/Excavation</u>					
	2023				
Total Haul Trips	21600				
Hauling	200	54	8	20	15
Vendor	1	54	8	6.9	15
Worker	10	54	8	14.7	0
 <u>Drainage/Utilities/Trenching</u>					
	2023				
Total Haul Trips	13136				
Hauling	204	92	8	20	15
Vendor	1	92	8	6.9	15
Worker	10	92	8	14.7	0
 <u>Foundations/Concrete Pour</u>					
	2023				
Total Haul Trips	960				
Hauling	60	16	8	20	15
Vendor	61	16	8	6.9	15
Worker	35	16	8	14.7	0
 <u>Structure/Exterior Construction</u>					
	2023				
Total Haul Trips	6240				
Hauling	60	104	8	20	15
Vendor	61	104	8	6.9	15
Worker	100	104	8	14.7	0

**8631 Hayden Place**  
**Total On-Road Emissions**

236 Max construction days per year

<b>Construction Phase</b>	<b>Daily One-Way Trips</b>	<b>Haul Days per Phase (days)</b>	<b>Work Hours per Day (hours/day)</b>	<b>One-Way Trip Distance per Day (miles)</b>	<b>Idling per Day (minutes)</b>
<u>Structure/Exterior Construction</u>	2024				
Total Haul Trips	7920				
Hauling	60	132	8	20	15
Vendor	61	132	8	6.9	15
Worker	100	132	8	14.7	0
 <u>Interior Construction</u>	 2023				
Total Haul Trips	1248				
Hauling	16	78	8	20	15
Vendor	1	78	8	6.9	15
Worker	65	78	8	14.7	0
 <u>Interior Construction</u>	 2024				
Total Haul Trips	3360				
Hauling	16	210	8	20	15
Vendor	1	210	8	6.9	15
Worker	65	210	8	14.7	0
 <u>Paving/Landscaping</u>	 2024				
Total Haul Trips	208				
Hauling	8	26	8	20	15
Vendor	1	26	8	6.9	15
Worker	25	26	8	14.7	0

**8631 Hayden Place**  
**Total On-Road Emissions**

Construction Phase	Regional Emissions (Tons/year)										(MT/yr) Total CO2e	
	ROG	NOX	CO	SO2	PM10 Dust	PM10 Exh	Total PM10	PM2.5 Dust	PM2.5 Exh	Total PM2.5		
<u>Demolition</u>												
Total Haul Trips												
Hauling	0.00	0.03	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.31
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.31
Worker	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.22
<u>Site Preparation</u>												
Total Haul Trips												
Hauling	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.62
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.32
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.63
<u>Grading/Excavation</u>												
Total Haul Trips												
Hauling	0.00	0.61	0.34	0.00	0.06	0.01	0.06	0.01	0.01	0.02	391.64	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.64	
Worker	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.54	
<u>Drainage/Utilities/Trenching</u>												
Total Haul Trips												
Hauling	0.01	1.07	0.60	0.01	0.10	0.01	0.11	0.02	0.01	0.03	680.58	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.09	
Worker	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.32	
<u>Foundations/Concrete Pour</u>												
Total Haul Trips												
Hauling	0.00	0.05	0.03	0.00	0.01	0.00	0.01	0.00	0.00	0.00	34.81	
Vendor	0.00	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.60	
Worker	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.63	
<u>Structure/Exterior Construction</u>												
Total Haul Trips												
Hauling	0.00	0.35	0.20	0.00	0.03	0.00	0.04	0.01	0.00	0.01	226.28	
Vendor	0.00	0.13	0.10	0.00	0.01	0.00	0.01	0.00	0.00	0.00	75.39	
Worker	0.00	0.02	0.20	0.00	0.02	0.00	0.02	0.00	0.00	0.00	48.87	



8631 Hayden Place  
Running Emissions

		Running Emissions Factor (grams/mile)					
		ROG	NOX	CO	SO2	PM10	PM2.5
2024	Hauling Hauling	0.01500166	1.757966945	0.5097505	0.01416696	0.02319781	0.02218961
2024	Vendor Vendor	0.02221033	1.324663487	0.47751009	0.01284951	0.01640294	0.01568629
2024	Worker Worker	0.01996092	0.084125691	1.11121797	0.00306134	0.00178709	0.00164482
2023	Hauling Hauling	0.01583726	1.846349092	0.53216798	0.01440181	0.02335548	0.02234022
2023	Vendor Vendor	0.02517402	1.413009631	0.53163708	0.01304101	0.01704589	0.01630115
2023	Worker Worker	0.02253027	0.09409696	1.20532597	0.00313687	0.00190111	0.00175
2026	Hauling Hauling	0.01368221	1.614053992	0.47684787	0.01364538	0.0226378	0.02165426
2026	Vendor Vendor	0.01750743	1.169214075	0.39765668	0.0123973	0.01509905	0.01443925
2026	Worker Worker	0.01606854	0.068748951	0.96388598	0.00292729	0.0016094	0.00148096
2027	Hauling Hauling	0.013128	1.553518611	0.45473657	0.01336714	0.02273486	0.02174732
2027	Vendor Vendor	0.01570588	1.102331968	0.36327753	0.01214871	0.01475662	0.01411185
2027	Worker Worker	0.01447264	0.062492418	0.90230685	0.0028686	0.00150729	0.0013867
GWP		N/A	N/A	N/A	N/A	N/A	N/A

Construction Phase	Daily One-Way Trips	Haul Days per Phase (days)	Work Hours per Day (hours/day)	One-Way Trip Distance per Day (miles)	Regional Emissions (pounds/day)					
					ROG	NOX	CO	SO2	PM10	PM2.5
<u>Demolition</u>		<u>2023</u>								
Total Haul Trips		500								
Hauling	80	7	8	20	0.06	6.51	1.88	0.05	0.08	0.08
Vendor	1	26	8	6.9	0.00	0.02	0.01	0.00	0.00	0.00
Worker	10	26	8	14.7	0.01	0.03	0.39	0.00	0.00	0.00
<u>Site Preparation</u>		<u>2023</u>								
Total Haul Trips		200								
Hauling	30	7	8	20	0.02	2.44	0.70	0.02	0.03	0.03
Vendor	1	27	8	6.9	0.00	0.02	0.01	0.00	0.00	0.00
Worker	5	27	8	14.7	0.00	0.02	0.20	0.00	0.00	0.00
<u>Grading/Excavation</u>		<u>2023</u>								
Total Haul Trips		21600								
Hauling	200	54	8	20	0.14	16.28	4.69	0.13	0.21	0.20
Vendor	1	54	8	6.9	0.00	0.02	0.01	0.00	0.00	0.00
Worker	10	54	8	14.7	0.01	0.03	0.39	0.00	0.00	0.00
<u>Drainage/Utilities/Trenching</u>		<u>2023</u>								
Total Haul Trips		13136								
Hauling	204	92	8	20	0.14	16.61	4.79	0.13	0.21	0.20
Vendor	1	92	8	6.9	0.00	0.02	0.01	0.00	0.00	0.00
Worker	10	92	8	14.7	0.01	0.03	0.39	0.00	0.00	0.00

8631 Hayden Place  
Running Emissions

		Running Emissions Factor (grams/mile)					
		ROG	NOX	CO	SO2	PM10	PM2.5
2024	Hauling Hauling	0.01500166	1.757966945	0.5097505	0.01416696	0.02319781	0.02218961
2024	Vendor Vendor	0.02221033	1.324663487	0.47751009	0.01284951	0.01640294	0.01568629
2024	Worker Worker	0.01996092	0.084125691	1.11121797	0.00306134	0.00178709	0.00164482
2023	Hauling Hauling	0.01583726	1.846349092	0.53216798	0.01440181	0.02335548	0.02234022
2023	Vendor Vendor	0.02517402	1.413009631	0.53163708	0.01304101	0.01704589	0.01630115
2023	Worker Worker	0.02253027	0.09409696	1.20532597	0.00313687	0.00190111	0.001175
2026	Hauling Hauling	0.01368221	1.614053992	0.47684787	0.01364538	0.0226378	0.02165426
2026	Vendor Vendor	0.01750743	1.169214075	0.39765668	0.0123973	0.01509905	0.01443925
2026	Worker Worker	0.01606854	0.068748951	0.96388598	0.00292729	0.0016094	0.00148096
2027	Hauling Hauling	0.013128	1.553518611	0.45473657	0.01336714	0.02273486	0.02174732
2027	Vendor Vendor	0.01570588	1.102331968	0.36327753	0.01214871	0.01475662	0.01411185
2027	Worker Worker	0.01447264	0.062492418	0.90230685	0.0028686	0.00150729	0.0013867
GWP		N/A	N/A	N/A	N/A	N/A	N/A

Construction Phase	Daily One-Way Trips	Haul Days per Phase (days)	Work Hours per Day (hours/day)	One-Way Trip Distance per Day (miles)	Regional Emissions (pounds/day)					
					ROG	NOX	CO	SO2	PM10	PM2.5
<u>Foundations/Concrete Pours</u>										
	2023									
Total Haul Trips	960									
Hauling	60	16	8	20	0.04	4.88	1.41	0.04	0.06	0.06
Vendor	61	16	8	6.9	0.02	1.31	0.49	0.01	0.02	0.02
Worker	35	16	8	14.7	0.03	0.11	1.37	0.00	0.00	0.00
<u>Structure/Exterior Construction</u>										
	2023									
Total Haul Trips	6240									
Hauling	60	104	8	20	0.04	4.88	1.41	0.04	0.06	0.06
Vendor	61	104	8	6.9	0.02	1.31	0.49	0.01	0.02	0.02
Worker	100	104	8	14.7	0.07	0.30	3.91	0.01	0.01	0.01
	2024									
Total Haul Trips	7920									
Hauling	60	132	8	20	0.04	4.65	1.35	0.04	0.06	0.06
Vendor	61	132	8	6.9	0.02	1.23	0.44	0.01	0.02	0.01
Worker	100	132	8	14.7	0.06	0.27	3.60	0.01	0.01	0.01
<u>Interior Construction</u>										
	2023									
Total Haul Trips	1248									
Hauling	16	78	8	20	0.01	1.30	0.38	0.01	0.02	0.02
Vendor	1	78	8	6.9	0.00	0.02	0.01	0.00	0.00	0.00
Worker	65	78	8	14.7	0.05	0.20	2.54	0.01	0.00	0.00
	2024									
Total Haul Trips	3360									
Hauling	16	210	8	20	0.01	1.24	0.36	0.01	0.02	0.02
Vendor	1	210	8	6.9	0.00	0.02	0.01	0.00	0.00	0.00
Worker	65	210	8	14.7	0.04	0.18	2.34	0.01	0.00	0.00
<u>Paving/Landscaping</u>										
	2024									
Total Haul Trips	208									
Hauling	8	26	8	20	0.01	0.62	0.18	0.00	0.01	0.01
Vendor	1	26	8	6.9	0.00	0.02	0.01	0.00	0.00	0.00
Worker	25	26	8	14.7	0.02	0.07	0.90	0.00	0.00	0.00

8631 Hayden Place  
Running Emissions

	Running Emissions Factor (grams/mile)		
	CO2	CH4	N2O
2024Hauling Hauling	1557.21286	0.07114403	0.24811684
2024Vendor Vendor	1384.23319	0.03949423	0.19181212
2024Worker Worker	309.685005	0.0047538	0.0069466
2023Hauling Hauling	1582.16594	0.07485845	0.25204854
2023Vendor Vendor	1404.04014	0.0416683	0.1941139
2023Worker Worker	317.32672	0.00530072	0.00752789
2026Hauling Hauling	1501.9816	0.06476403	0.23941148
2026Vendor Vendor	1337.37545	0.03590634	0.1862605
2026Worker Worker	296.123967	0.00390838	0.00603404
2027Hauling Hauling	1471.80075	0.0608523	0.23462364
2027Vendor Vendor	1311.1435	0.0381904	0.18307889
2027Worker Worker	290.185649	0.00356123	0.00566307
GWP	1	25	290

Construction Phase	Daily One-Way Trips	Haul Days per Phase (days)	Work Hours per Day (hours/day)	One-Way Trip Distance per Day (miles)	Regional Emissions (MT/year)			
					CO2	CH4	N2O	CO2e
<u>Demolition</u> 2023								
Total Haul Trips	500							
Hauling	80	7	8	20	17.72	0.02	0.82	18.56
Vendor	1	26	8	6.9	0.25	0.00	0.01	0.26
Worker	10	26	8	14.7	1.21	0.00	0.01	1.22
<u>Site Preparation</u> 2023								
Total Haul Trips	200							
Hauling	30	7	8	20	6.65	0.01	0.31	6.96
Vendor	1	27	8	6.9	0.26	0.00	0.01	0.27
Worker	5	27	8	14.7	0.63	0.00	0.00	0.63
<u>Grading/Excavation</u> 2023								
Total Haul Trips	21600							
Hauling	200	54	8	20	341.75	0.40	15.79	357.94
Vendor	1	54	8	6.9	0.52	0.00	0.02	0.54
Worker	10	54	8	14.7	2.52	0.00	0.02	2.54
<u>Drainage/Utilities/Trenching</u> 2023								
Total Haul Trips	13136							
Hauling	204	92	8	20	593.88	0.70	27.44	622.02
Vendor	1	92	8	6.9	0.89	0.00	0.04	0.93
Worker	10	92	8	14.7	4.29	0.00	0.03	4.32



8631 Hayden Place  
Running Emissions

	Running Emissions Factor (grams/mile)		
	CO2	CH4	N2O
2024Hauling Hauling	1557.21286	0.07114403	0.24811684
2024Vendor Vendor	1384.23319	0.03949423	0.19181212
2024Worker Worker	309.685005	0.0047538	0.0069466
2023Hauling Hauling	1582.16594	0.07485845	0.25204854
2023Vendor Vendor	1404.04014	0.0416683	0.1941139
2023Worker Worker	317.32672	0.00530072	0.00752789
2026Hauling Hauling	1501.9816	0.06476403	0.23941148
2026Vendor Vendor	1337.37545	0.03590634	0.1862605
2026Worker Worker	296.123967	0.00390838	0.00603404
2027Hauling Hauling	1471.80075	0.0608523	0.23462364
2027Vendor Vendor	1311.1435	0.03381904	0.18307889
2027Worker Worker	290.185649	0.00356123	0.00566307
GWP	1	25	290

Construction Phase	Daily One-Way Trips	Haul Days per Phase (days)	Work Hours per Day (hours/day)	One-Way Trip Distance per Day (miles)	Regional Emissions (MT/year)			
					CO2	CH4	N2O	CO2e
<u>Foundations/Concrete Pour</u>								
	2023							
Total Haul Trips	960							
Hauling	60	16	8	20	30.38	0.04	1.40	31.82
Vendor	61	16	8	6.9	9.46	0.01	0.38	9.84
Worker	35	16	8	14.7	2.61	0.00	0.02	2.63
<u>Structure/Exterior Construction</u>								
	2023							
Total Haul Trips	6240							
Hauling	60	104	8	20	197.45	0.23	9.12	206.81
Vendor	61	104	8	6.9	61.46	0.05	2.46	63.97
Worker	100	104	8	14.7	48.51	0.02	0.33	48.87
	2024							
Total Haul Trips	7920							
Hauling	60	132	8	20	246.66	0.28	11.40	258.34
Vendor	61	132	8	6.9	76.91	0.05	3.09	80.05
Worker	100	132	8	14.7	60.09	0.02	0.39	60.51
<u>Interior Construction</u>								
	2023							
Total Haul Trips	1248							
Hauling	16	78	8	20	39.49	0.05	1.82	41.36
Vendor	1	78	8	6.9	0.76	0.00	0.03	0.79
Worker	65	78	8	14.7	23.65	0.01	0.16	23.82
	2024							
Total Haul Trips	3360							
Hauling	16	210	8	20	104.64	0.12	4.84	109.60
Vendor	1	210	8	6.9	2.01	0.00	0.08	2.09
Worker	65	210	8	14.7	62.14	0.02	0.40	62.57
<u>Paving/Landscaping</u>								
	2024							
Total Haul Trips	208							
Hauling	8	26	8	20	6.48	0.01	0.30	6.78
Vendor	1	26	8	6.9	0.25	0.00	0.01	0.26
Worker	25	26	8	14.7	2.96	0.00	0.02	2.98





8631 Hayden Place  
Idling Emissions

Idling Emissions Factor (grams/minute)			
	CO2	CH4	N2O
2024Hauling Hauling	193.696523	0.03572269	0.03108579
2024Vendor Vendor	112.064658	0.01999509	0.01784439
2024Worker Worker	0	0	0
2023Hauling Hauling	197.892347	0.03639331	0.0317437
2023Vendor Vendor	114.204071	0.02028175	0.01817316
2023Worker Worker	0	0	0
2026Hauling Hauling	185.455078	0.03474182	0.02979533
2026Vendor Vendor	107.716187	0.0195758	0.01717618
2026Worker Worker	0	0	0
2027Hauling Hauling	181.442358	0.03427011	0.02916541
2027Vendor Vendor	105.535988	0.01936291	0.01683969
2027Worker Worker	0	0	0
GWP	1	25	290

Construction Phase	Daily One-Way Trips	Haul Days per Phase (days)	Work Hours per Day (hours/day)	Idling minutes per Day (miles)	Regional Emissions (MT/year)			
					CO2	CH4	N2O	CO2e
<u>Demolition</u> 2023								
Total Haul Trips	500							
Hauling	80	7	8	15	1.66	0.01	0.08	1.75
Vendor	1	26	8	15	0.04	0.00	0.00	0.05
Worker	10	26	8	0	0.00	0.00	0.00	0.00
<u>Site Preparation</u> 2023								
Total Haul Trips	200							
Hauling	30	7	8	15	0.62	0.00	0.03	0.66
Vendor	1	27	8	15	0.05	0.00	0.00	0.05
Worker	5	27	8	0	0.00	0.00	0.00	0.00
<u>Grading/Excavation</u> 2023								
Total Haul Trips	21600							
Hauling	200	54	8	15	32.06	0.15	1.49	33.70
Vendor	1	54	8	15	0.09	0.00	0.00	0.10
Worker	10	54	8	0	0.00	0.00	0.00	0.00
<u>Drainage/Utilities/Trenching</u> 2023								
Total Haul Trips	13136							
Hauling	204	92	8	15	55.71	0.26	2.59	58.56
Vendor	1	92	8	15	0.16	0.00	0.01	0.17
Worker	10	92	8	0	0.00	0.00	0.00	0.00

8631 Hayden Place  
Idling Emissions

	Idling Emissions Factor (grams/minute)		
	CO2	CH4	N2O
2024Hauling Hauling	193.696523	0.03572269	0.03108579
2024Vendor Vendor	112.064658	0.01999509	0.01784439
2024Worker Worker	0	0	0
2023Hauling Hauling	197.892347	0.03639331	0.0317437
2023Vendor Vendor	114.204071	0.02028175	0.01817316
2023Worker Worker	0	0	0
2026Hauling Hauling	185.455078	0.03474182	0.02979533
2026Vendor Vendor	107.716187	0.0195758	0.01717618
2026Worker Worker	0	0	0
2027Hauling Hauling	181.442358	0.03427011	0.02916541
2027Vendor Vendor	105.535988	0.01936291	0.01683969
2027Worker Worker	0	0	0
GWP	1	25	290

Construction Phase	Daily One-Way Trips	Haul Days per Phase (days)	Work Hours per Day (hours/day)	Idling minutes per Day (miles)	Regional Emissions (MT/year)			
					CO2	CH4	N2O	CO2e
<u>Foundations/Concrete Pours</u> 2023								
Total Haul Trips	960							
Hauling	60	16	8	15	2.85	0.01	0.13	3.00
Vendor	61	16	8	15	1.67	0.01	0.08	1.76
Worker	35	16	8	0	0.00	0.00	0.00	0.00
<u>Structure/Exterior Construction</u> 2023								
Total Haul Trips	6240							
Hauling	60	104	8	15	18.52	0.09	0.86	19.47
Vendor	61	104	8	15	10.87	0.05	0.50	11.42
Worker	100	104	8	0	0.00	0.00	0.00	0.00
<u>Structure/Exterior Construction</u> 2024								
Total Haul Trips	7920							
Hauling	60	132	8	15	23.01	0.11	1.07	24.19
Vendor	61	132	8	15	13.54	0.06	0.63	14.22
Worker	100	132	8	0	0.00	0.00	0.00	0.00
<u>Interior Construction</u> 2023								
Total Haul Trips	1248							
Hauling	16	78	8	15	3.70	0.02	0.17	3.89
Vendor	1	78	8	15	0.13	0.00	0.01	0.14
Worker	65	78	8	0	0.00	0.00	0.00	0.00
<u>Interior Construction</u> 2024								
Total Haul Trips	3360							
Hauling	16	210	8	15	9.76	0.05	0.45	10.26
Vendor	1	210	8	15	0.35	0.00	0.02	0.37
Worker	65	210	8	0	0.00	0.00	0.00	0.00
<u>Paving/Landscaping</u> 2024								
Total Haul Trips	208							
Hauling	8	26	8	15	0.60	0.00	0.03	0.64
Vendor	1	26	8	15	0.04	0.00	0.00	0.05
Worker	25	26	8	0	0.00	0.00	0.00	0.00

**8631 Hayden Place**  
**Road Dust, Break Wear, and Tire wear Emissions**

	Emission Factors (grams/mile)					
	PM10			PM2.5		
	RD	BW	TW	RD	BW	TW
2024Hauling Hauling	1.23E-01	0.08427948	0.03543928	1.85E-02	0.02949782	0.00885982
2024Vendor Vendor	1.23E-01	0.063890978	0.02371964	1.85E-02	0.02236184	0.00592991
2024Worker Worker	1.23E-01	0.009419633	0.008	1.85E-02	0.00329687	0.002
2023Hauling Hauling	1.23E-01	0.084714206	0.03543552	1.85E-02	0.02964997	0.00885888
2023Vendor Vendor	1.23E-01	0.064163683	0.02371776	1.85E-02	0.02245729	0.00592944
2023Worker Worker	1.23E-01	0.009477692	0.008	1.85E-02	0.00331719	0.002
2026Hauling Hauling	1.23E-01	0.084352575	0.03544711	1.85E-02	0.0295234	0.00886178
2026Vendor Vendor	1.23E-01	0.063787152	0.02372356	1.85E-02	0.0223255	0.00593089
2026Worker Worker	1.23E-01	0.009353635	0.008	1.85E-02	0.00327377	0.002
2027Hauling Hauling	1.23E-01	0.084297987	0.03545106	1.85E-02	0.0295043	0.00886277
2027Vendor Vendor	1.23E-01	0.063623189	0.02372553	1.85E-02	0.02226812	0.00593138
2027Worker Worker	1.23E-01	0.009305649	0.008	1.85E-02	0.00325698	0.002

Construction Phase	Daily One-Way Trips	Haul Days per Phase (days)	Work Hours per Day (hours/day)	One-Way Trip Distance per Day (miles)	Regional Emissions (pounds/day)					
					RD	PM10 BW	TW	RD	PM2.5 BW	TW
<u>Demolition</u> 2023										
Total Haul Trips	500									
Hauling	80	7	8	20	0.43	0.30	0.12	0.07	0.10	0.03
Vendor	1	26	8	6.9	0.00	0.00	0.00	0.00	0.00	0.00
Worker	10	26	8	14.7	0.04	0.00	0.00	0.01	0.00	0.00
<u>Site Preparation</u> 2023										
Total Haul Trips	200									
Hauling	30	7	8	20	0.16	0.11	0.05	0.02	0.04	0.01
Vendor	1	27	8	6.9	0.00	0.00	0.00	0.00	0.00	0.00
Worker	5	27	8	14.7	0.02	0.00	0.00	0.00	0.00	0.00
<u>Grading/Excavation</u> 2023										
Total Haul Trips	21600									
Hauling	200	54	8	20	1.09	0.75	0.31	0.16	0.26	0.08
Vendor	1	54	8	6.9	0.00	0.00	0.00	0.00	0.00	0.00
Worker	10	54	8	14.7	0.04	0.00	0.00	0.01	0.00	0.00
<u>Drainage/Utilities/Trenchin</u> 2023										
Total Haul Trips	13136									
Hauling	204	92	8	20	1.11	0.76	0.32	0.17	0.27	0.08
Vendor	1	92	8	6.9	0.00	0.00	0.00	0.00	0.00	0.00
Worker	10	92	8	14.7	0.04	0.00	0.00	0.01	0.00	0.00

**8631 Hayden Place**  
**Road Dust, Break Wear, and Tire wear Emissions**

	Emission Factors (grams/mile)					
	PM10			PM2.5		
	RD	BW	TW	RD	BW	TW
2024Hauling Hauling	1.23E-01	0.08427948	0.03543928	1.85E-02	0.02949782	0.00885982
2024Vendor Vendor	1.23E-01	0.063890978	0.02371964	1.85E-02	0.02236184	0.00592991
2024Worker Worker	1.23E-01	0.009419633	0.008	1.85E-02	0.00329687	0.002
2023Hauling Hauling	1.23E-01	0.084714206	0.03543552	1.85E-02	0.02964997	0.00885888
2023Vendor Vendor	1.23E-01	0.064163683	0.02371776	1.85E-02	0.02245729	0.00592944
2023Worker Worker	1.23E-01	0.009477692	0.008	1.85E-02	0.00331719	0.002
2026Hauling Hauling	1.23E-01	0.084352575	0.03544711	1.85E-02	0.0295234	0.00886178
2026Vendor Vendor	1.23E-01	0.063787152	0.02372356	1.85E-02	0.0223255	0.00593089
2026Worker Worker	1.23E-01	0.009353635	0.008	1.85E-02	0.00327377	0.002
2027Hauling Hauling	1.23E-01	0.084297987	0.03545106	1.85E-02	0.0295043	0.00886277
2027Vendor Vendor	1.23E-01	0.063623189	0.02372553	1.85E-02	0.02226812	0.00593138
2027Worker Worker	1.23E-01	0.009305649	0.008	1.85E-02	0.00325698	0.002

Construction Phase	Daily One-Way Trips	Haul Days per Phase (days)	Work Hours per Day (hours/day)	One-Way Trip Distance per Day (miles)	Regional Emissions (pounds/day)					
					RD	PM10 BW	TW	RD	PM2.5 BW	TW
<u>Foundations/Concrete Pour</u> 2023										
Total Haul Trips	960									
Hauling	60	16	8	20	0.33	0.22	0.09	0.05	0.08	0.02
Vendor	61	16	8	6.9	0.11	0.06	0.02	0.02	0.02	0.01
Worker	35	16	8	14.7	0.14	0.01	0.01	0.02	0.00	0.00
<u>Structure/Exterior Construc</u> 2023										
Total Haul Trips	6240									
Hauling	60	104	8	20	0.33	0.22	0.09	0.05	0.08	0.02
Vendor	61	104	8	6.9	0.11	0.06	0.02	0.02	0.02	0.01
Worker	100	104	8	14.7	0.40	0.03	0.03	0.06	0.01	0.01
<u>Structure/Exterior Construc</u> 2024										
Total Haul Trips	7920									
Hauling	60	132	8	20	0.33	0.22	0.09	0.05	0.08	0.02
Vendor	61	132	8	6.9	0.11	0.06	0.02	0.02	0.02	0.01
Worker	100	132	8	14.7	0.40	0.03	0.03	0.06	0.01	0.01
<u>Interior Construction</u> 2023										
Total Haul Trips	1248									
Hauling	16	78	8	20	0.09	0.06	0.02	0.01	0.02	0.01
Vendor	1	78	8	6.9	0.00	0.00	0.00	0.00	0.00	0.00
Worker	65	78	8	14.7	0.26	0.02	0.02	0.04	0.01	0.00
<u>Interior Construction</u> 2024										
Total Haul Trips	3360									
Hauling	16	210	8	20	0.09	0.06	0.03	0.01	0.02	0.01
Vendor	1	210	8	6.9	0.00	0.00	0.00	0.00	0.00	0.00
Worker	65	210	8	14.7	0.26	0.02	0.02	0.04	0.01	0.00
<u>Paving/Landscaping</u> 2024										
Total Haul Trips	208									
Hauling	8	26	8	20	0.04	0.03	0.01	0.01	0.01	0.00
Vendor	1	26	8	6.9	0.00	0.00	0.00	0.00	0.00	0.00
Worker	25	26	8	14.7	0.10	0.01	0.01	0.01	0.00	0.00





**8631 Hayden Place  
Air Quality and Greenhouse Gas Assessment**

**Localized Operational Emissions**

**Maximum Unmitigated Localized Operational Emissions (pounds per day) <sup>a</sup>**

<b>Source</b>	<b>NO<sub>x</sub></b>	<b>CO</b>	<b>PM<sub>10</sub></b>	<b>PM<sub>2.5</sub></b>
Area (Consumer Products, Landscaping)	0.12	0.23	0.01	0.01
Energy (Natural Gas)	0.68	0.57	0.05	0.05
Stationary Sources (Generator, Charbroiler)	25.44	14.56	0.62	0.41
<b>Total Project On-Site Emissions</b>	<b>26</b>	<b>15</b>	<b>0.7</b>	<b>0.5</b>
<b>SCAQMD Numeric Indicators</b>	<b>147.0</b>	<b>827.0</b>	<b>2.0</b>	<b>1.0</b>
Over/(Under)	(121)	(812)	(1.3)	(0.5)
<b>Exceeds Thresholds?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>

*Localized significance thresholds from SCAQMD Look-Up tables, used a 5-acre site in SRA 2 with the nearest sensitive receptor within 25 meters from the Site.*

**8631 Hayden Place  
Air Quality and Greenhouse Gas Assessment**

**Existing Operational Emissions**

**Estimated Existing Operational Emissions (pounds per day) <sup>a</sup>**

<b>Source</b>	<b>VOC</b>	<b>NO<sub>x</sub></b>	<b>CO</b>	<b>SO<sub>2</sub></b>	<b>PM<sub>10</sub></b>	<b>PM<sub>2.5</sub></b>
Area (Consumer Products, Landscaping)	1	<1	<1	<1	<1	<1
Energy (Natural Gas)	<1	<1	<1	<1	<1	<1
Motor Vehicles	<1	<1	6	<1	<1	<1
<b>Maximum Net Regional (On-Site and Off-Site) Emissions</b>	<b>2</b>	<b>&lt;1</b>	<b>7</b>	<b>&lt;1</b>	<b>&lt;1</b>	<b>&lt;1</b>
<b>SCAQMD Numeric Indicators</b>	<b>55</b>	<b>55</b>	<b>550</b>	<b>150</b>	<b>150</b>	<b>55</b>
Over/(Under)	(53)	55	(543)	150	150	55
Exceeds Thresholds?	No	No	No	No	No	No

**Paseo Norte Apartment Project  
Operational GHG Analysis - Year 2025**

**Estimated Electricity demand from Electric Vehicle Supply Equipment (EVSE)**

Land Use Type	Number of Parking Spaces	Number of Parking Spaces with EV Chargers	Average Charge (kWh/day) <sup>a</sup>	Days/Year	Electricity Demand (kWh/yr)	Electricity Demand (MWh/yr)
<b>Total</b>	<b>750</b>	<b>276</b>	<b>4.4</b>	<b>365</b>	443,256	443.26

Notes:

- a. Estimated based on reference sources listed below.

Sources:

US Department of Energy. Alternative Fuels Data Center, 2016. Hybrid and Plug-In Electric Vehicle Emissions Data Sources and Assumptions.

Available at: [https://www.afdc.energy.gov/vehicles/electric\\_emissions\\_sources.html](https://www.afdc.energy.gov/vehicles/electric_emissions_sources.html).

US Department of Energy. Smith, Margaret, 2016. Level 1 Electric Vehicle Charging Stations at the Workplace.

Available at: [https://www.afdc.energy.gov/uploads/publication/WPCC\\_L1ChargingAtTheWorkplace\\_0716.pdf](https://www.afdc.energy.gov/uploads/publication/WPCC_L1ChargingAtTheWorkplace_0716.pdf).

UCLA Luskin Center for Innovation. Williams, Brett and JR deShazo, 2013. Pricing Workplace Charging: Financial Viability and Fueling Costs.

Available at: <http://luskin.ucla.edu/sites/default/files/Luskin-WPC-TRB-13-11-15d.pdf>.

2019 Calgreen Building Standards Code, Title 24 Part 11

Available: [https://library.municode.com/ca/long\\_beach/codes/municipal\\_code?nodeId=TIT18LOBEBUSTCO\\_CH18.47GRBUSTCO\\_18.47.050AMCASE5.106.5.3.3TA5.106.5.3.WNOEVCHSPCHSTCA](https://library.municode.com/ca/long_beach/codes/municipal_code?nodeId=TIT18LOBEBUSTCO_CH18.47GRBUSTCO_18.47.050AMCASE5.106.5.3.3TA5.106.5.3.WNOEVCHSPCHSTCA)

Electricity Emission Factor (MT CO2/MWh)	Electricity Emission Factor (lbs CO2/MWh)	Total EV Charging GHG Emissions Per Year
0.15	334.37	67.74
(MT CH4/MWh)	(lbs CH4/MWh)	
1.32E-05	0.029	
(MT N2O/MWh)	(lbs N2O/MWh)	
2.80E-06	0.00617	

**Air Quality and Greenhouse Gas Assessment**

**Emergency Generator Emissions**

updated: 8/7/2019

**Conversion Factors**

HP/kW	1.3410	
CO2 g/gal	10.21	Climate Registry, Table 13.1: <a href="https://www.theclimaterestistry.org/wp-content/uploads/2014/11/2016-Climate-Registry-Default-Emission-Factors.pdf">https://www.theclimaterestistry.org/wp-content/uploads/2014/11/2016-Climate-Registry-Default-Emission-Factors.pdf</a>
CH4 g/gal	0.58	Climate Registry, Table 13.7: <a href="https://www.theclimaterestistry.org/wp-content/uploads/2014/11/2016-Climate-Registry-Default-Emission-Factors.pdf">https://www.theclimaterestistry.org/wp-content/uploads/2014/11/2016-Climate-Registry-Default-Emission-Factors.pdf</a>
N2O g/gal	0.26	Climate Registry, Table 13.7: <a href="https://www.theclimaterestistry.org/wp-content/uploads/2014/11/2016-Climate-Registry-Default-Emission-Factors.pdf">https://www.theclimaterestistry.org/wp-content/uploads/2014/11/2016-Climate-Registry-Default-Emission-Factors.pdf</a>
GWP CH4	25	IPCC AR4
GWP N2O	298	IPCC AR4
CO2e g/gal	10,302	
CO2 g/gal	10,210	
CO2/CO2e	0.9911	

Climate Registry, Table 13.1: <https://www.theclimaterestistry.org/wp-content/uploads/2014/11/2016-Climate-Registry-Default-Emission-Factors.pdf>  
 Climate Registry, Table 13.7: <https://www.theclimaterestistry.org/wp-content/uploads/2014/11/2016-Climate-Registry-Default-Emission-Factors.pdf>  
 Climate Registry, Table 13.7: <https://www.theclimaterestistry.org/wp-content/uploads/2014/11/2016-Climate-Registry-Default-Emission-Factors.pdf>  
 IPCC AR4  
 IPCC AR4

**Emergency Generator 1**

Ratings <sup>5</sup> :	1,275 kW	<i>(based on engineering assumptions)</i>
	1,710 HP	<i>(based on engineering assumptions; conversion from kW to hp)</i>
	kW	<i>(based on engineering assumptions)</i>
	- HP	<i>(conversion from kW to hp)</i>
Load Factor:	0.74	<i>(based on CalEEMod Generator Set Load Factor)</i>
Engine Emissions Tier:	Rule 1470 Compliant	<i>(compliance with CARB and AQMD diesel regulations)</i>
Operating Hours per Unit:	2 hours/day	<i>(testing/maintenance)</i>
	50 hours/year	<i>(testing/maintenance, Regulatory Limit per SCAQMD Rule 1470)</i>

kW	<i>(based on engineering assumptions)</i>
HP	<i>(based on engineering assumptions; conversion from kW to hp)</i>
kW	<i>(based on engineering assumptions)</i>
HP	<i>(conversion from kW to hp)</i>
	<i>(based on CalEEMod Generator Set Load Factor)</i>
	<i>(compliance with CARB and AQMD diesel regulations)</i>
hours/day	<i>(testing/maintenance)</i>
hours/year	<i>(testing/maintenance, Regulatory Limit per SCAQMD Rule 1470)</i>

Emergency Generator 1 Emissions

Units	Criteria Pollutants <sup>1, 2, 3</sup>						Greenhouse Gases <sup>1</sup>	
	VOC	NO <sub>x</sub>	CO	SO <sub>x</sub>	PM10	PM2.5	CO <sub>2</sub>	CO <sub>2</sub> e
g/kW-hr	—	—	3.50	—	—	—	—	—
g/HP-hr	0.24	4.56	2.61	5.50E-05	0.0192	0.0187	526.17	530.91
lbs/hr	0.67	12.72	7.28	0.00	0.05	0.05	1467.86	1481.09
<b>lbs/day</b>	<b>1.34</b>	<b>25.44</b>	<b>14.56</b>	<b>0.00</b>	<b>0.11</b>	<b>0.10</b>	2,935.73	2,962.18
lbs/yr	33.48	636.06	364.05	0.01	2.68	2.61	73393.20	74054.39
tons/yr	0.02	0.32	0.18	0.00	0.00	0.00	36.70	37.03
<b>metric tons/yr</b>	—	—	—	—	—	—	<b>33.29</b>	<b>33.59</b>

1. Emission factors for VOC and NO<sub>x</sub>: Regulatory Limit per SCAQMD Rule 1470 (Requirements for Stationary Diesel-Fueled Internal Combustion and Other Compression Ignition Engines).
2. Emission factors for CO, PM10, and PM2.5: Regulatory Limit per SCAQMD Rule 1470 (Requirements for Stationary Diesel-Fueled Internal Combustion and Other Compression Ignition Engines).
3. Emission factor for SO<sub>2</sub>: U.S. Environmental Protection Agency, AP-42 Compilation of Air Pollutant Emission Factors, Fifth Edition, Section 3.4, Table 3.4-1.  
Emission Factor for SO<sub>2</sub> is based on 15 ppm (0.0015%) S1 from the EPA Nonroad Diesel Fuel Program, and assumes complete conversion to SO<sub>2</sub>.
4. Emission factor for CO<sub>2</sub>: U.S. Environmental Protection Agency, AP-42 Compilation of Air Pollutant Emission Factors, Fifth Edition, Section 3.4, Table 3.4-1.  
Emissions of GHGs assume 99.11% of the CO<sub>2</sub>e emissions occur as CO<sub>2</sub>, which is typical for off-road diesel engines.
5. Power ratings based on Emergency Generator information provided by applicant and Emergency Fire Pump ratings at Staples Center. SCAQMD Facility Information Detail Database, 2019.

Source: SCAQMD Facility Information Detail Database, 2019. Facility ID: 118648

8631 Hayden Place Emission Inventory Methodology - Commercial Cooking Operations

Equipment Type	Restaurant Category				
	Ethnic	Family	Fast Food	Seafood	Steak and BBQ
<b>Percent of restaurants with equipment</b>					
Auto charbroilers	3.5	10.1	18.6	0.0	6.9
Underfired charbroilers	47.5	60.9	30.8	52.6	55.2
Deep-fat fryer	81.9	91.4	96.8	100.0	82.8
Glad griddles	62.7	82.9	51.9	36.8	89.7
Clamshell griddles	4.0	1.4	14.7	10.5	0.0
<b>Average number of units per restaurant type<sup>z</sup></b>					
Auto charbroilers	1.62	1.71	1.07	--	--
Underfired charbroilers	1.54	1.29	1.58	1.10	1.63
Deep-fat fryer	1.63	2.34	3.10	2.47	2.42
Glad griddles	1.88	2.03	1.43	1.11	1.35
Clamshell griddles	1.80	--	2.09	1.50	--

Type of Food	Total Food Cooked per Device (lb/week)				
	Chain-Driven Charbroilers <sup>a</sup>	Underfired Charbroilers	Deep-Fat Fryers	Flat Griddles	Clamshell Griddles
Steak	236	180	181	166	94
Hamburger	798	270	274	362	1,314
Poultry, with skin	147	144	365	88	113
Poultry, skinless	266	179	208	111	108
Pork	58	148	59	112	118
Seafood	119	143	159	92	632
Other meat	0	42	274	58	0
Potatoes	0	0	602	0	0

**Hollywood Center**

# of food venues 1  
 Days/week cooking 7  
 PM10 fraction of PM 0.7 Updated CEIDARS Table with PM2.5 Fractions  
 PM2.5 fraction of PM 0.42 Updated CEIDARS Table with PM2.5 Fractions

**Total # of equipment**

Type	Total Equip
Auto charbroilers	1.0
Underfired charbroilers	0.0

**Total lbs/day of meat**

Type	Auto charbroilers	Underfired charbroil	Deep-fat fryer	Glad griddles	Clamshell griddles	
Steak	33.7	0.0	0.0	0.0	0.0	0.2
Hamburger	114.0	0.0	0.0	0.0	0.0	2.6
Poultry, with skin	21.0	0.0	0.0	0.0	0.0	0.2
Poultry, skinless	38.0	0.0	0.0	0.0	0.0	0.2
Pork	8.3	0.0	0.0	0.0	0.0	0.2
Seafood	17.0	0.0	0.0	0.0	0.0	1.3
Other meat	0.0	0.0	0.0	0.0	0.0	0.0
Potatoes	0.0	0.0	0.0	0.0	0.0	0.0

Source <sup>1</sup>	Uncontrolled Emission Factors <sup>2</sup> (lb/1000 lb)		Quantity <sup>3</sup> (lb/day)	Emissions Controls <sup>4</sup> (percent reduction)		Controlled Emissions <sup>5</sup> (pounds/day)		
	ROG	PM		VOC	PM	VOC	PM2.5	PM10
<b>Project</b>								
Charbroiler - New York Steak	0.86	17.19	33.71	86%	85%	0.00	0.04	0.06
Charbroiler - 25% fat Hamburger	3.94	32.65	114.00	86%	85%	0.06	0.23	0.39
Charbroiler - Chicken	1.82	10.48	59.00	86%	85%	0.02	0.04	0.06
<b>Total Emissions</b>						<b>0.08</b>	<b>0.31</b>	<b>0.52</b>

1. Assume each restaurant has one charbroiler
2. South Coast Air Quality Management District, Emission Factors for Commercial Cooking Operations, [http://www.aqmd.gov/docs/default-source/rule-book/proposed-rules/1138/par1138pdsr\\_appendixi.pdf?sfvrsn=2](http://www.aqmd.gov/docs/default-source/rule-book/proposed-rules/1138/par1138pdsr_appendixi.pdf?sfvrsn=2). Accessed April 2016.
3. Quantity of steak and hamburger charbroiled is from SCAQMD Staff Report for Rule 1138 (Control of Emissions from Restaurant Operations) Dated October 10, 1997, found in SJVAPCD Final Draft Staff Report. Rule 4692 (Commercial Charbroiling). Quantity of chicken charbroiled and food fried is from San Joaquin Valley Unified Air Pollution Control District Emission Inventory Methodology 690 - Commercial Cooking Operations.
4. South Coast Air Quality Management District Rule 1138 (Control of Emissions from Restaurant Operations) regulates PM10 and VOC emissions from fast-food restaurants with charbroilers. Catalytic oxidizers reduce VOC emissions by approximately 86 percent and PM10 emissions by approximately 85 percent.
5. PM10 represents 70% of total PM and PM2.5 represents 42% of total PM from cooking/charbroiling operations, from: South Coast Air Quality Management District. 2006. Final -Methodology to Calculate Particulate Matter (PM) 2.5 and PM 2.5 Significance Thresholds. Appendix A: Updated CEIDARS Table with PM2.5 Fractions. Available: <[http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/particulate-matter-\(pm\)-2.5-significance-thresholds-and-calculation-methodology/appendix-a-updated-ceidars-table-with-pm2-5-fractions.doc?sfvrsn=2](http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/particulate-matter-(pm)-2.5-significance-thresholds-and-calculation-methodology/appendix-a-updated-ceidars-table-with-pm2-5-fractions.doc?sfvrsn=2)>. Accessed: February 10, 2017.

8631 Hayden Place  
 Air Quality and GHG Assessment  
 Operational Mobile Emissions

Unmitigated

Criteria Pollutant Emission Factors (lbs/mile)

	Year	Vehicle Type	Number of Trips	Trip Length (miles)	Max Daily VMT	Max Annual VMT	Criteria Pollutant Emission Factors (lbs/mile)									
							ROG	NOx	CO	SOx	PM10 Road Dust	PM10	PM10 Total	PM2_5 Road Dust	PM2_5	PM2.5 Total
Existing	2024	Passenger	159	14.7	2337.3	584,325	2.77E-04	1.95E-04	2.73E-03	6.69E-06	1.48E-04	4.15E-05	1.90E-04	2.22E-05	1.50E-05	3.73E-05
Project	2024	Passenger	2016	14.7	29635.2	7,408,800	2.77E-04	1.95E-04	2.73E-03	6.69E-06	1.48E-04	4.15E-05	1.90E-04	2.22E-05	1.50E-05	3.73E-05
Net Project Trips			1857		27297.9	6,824,475	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

Source: EMFAC 2021 & Gibson Traffic Study

GHG Emissions (metric tons/mile)				Criteria Pollutant Emissions (pounds/day)						GHG Emissions (metric tons/year)			
CO2	CH4	N2O	CO2e	ROG	NOx	CO	SOx	PM10 Total	PM2.5 Total	CO2 1	CH4 25	N2O 298	CO2e
3.07E-04	1.15E-08	9.21E-09	3.10E-04	0.65	0.46	6.38	0.02	0.44	0.09	179.4157	0.0067	0.0054	181.1864
3.07E-04	1.15E-08	9.21E-09	3.10E-04	8.21	5.78	80.93	0.20	5.62	1.10	2,274.8562	0.0850	0.0682	2,297.3062
0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.56	5.32	74.55	0.18	5.18	1.02	2,095.4405	0.0783	0.0628	2,116.1198



Hayden Place - Los Angeles-South Coast County, Summer

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

**Hayden Place**

**Los Angeles-South Coast County, Summer**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	245.00	1000sqft	1.00	245,000.00	0
Enclosed Parking with Elevator	750.00	Space	1.00	310,000.00	0
City Park	0.83	Acre	0.68	36,334.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	33
<b>Climate Zone</b>	11			<b>Operational Year</b>	2024
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MWhr)</b>	353.92	<b>CH4 Intensity (lb/MWhr)</b>	0.033	<b>N2O Intensity (lb/MWhr)</b>	0.004

**1.3 User Entered Comments & Non-Default Data**

Project Characteristics - Adjusted CO2e based off of Power Content Label

Land Use - See Construction Assumptions

Construction Phase - See Construction Assumptions

Off-road Equipment - See Construction Equipment

Off-road Equipment - See Construction Assumptions

Off-road Equipment - See Construction Assumptions

Off-road Equipment - See Construction Assumptions

Off-road Equipment - See Construction Assumptions

Off-road Equipment - See Construction Assumptions

Off-road Equipment - See Construction Assumptions

Hayden Place - Los Angeles-South Coast County, Summer

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

Off-road Equipment - See Construction Assumptions

Trips and VMT - On-road vehicles calculated on spreadsheet

Demolition -

Grading - See Construction Assumptions

Architectural Coating -

Area Coating -

Energy Use - Added Lighting Intensity for City parking area

Water And Wastewater - Use Irrigation Calculation Information

Solid Waste -

Construction Off-road Equipment Mitigation - See Construction Assumptions

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	FuelType	Diesel	Electrical
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	15.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	12.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 3

Hayden Place - Los Angeles-South Coast County, Summer

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

tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	10.00	80.00
tblConstructionPhase	NumDays	220.00	236.00
tblConstructionPhase	NumDays	220.00	288.00
tblConstructionPhase	NumDays	20.00	26.00
tblConstructionPhase	NumDays	6.00	54.00
tblConstructionPhase	NumDays	6.00	16.00
tblConstructionPhase	NumDays	3.00	27.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblEnergyUse	LightingElect	0.00	0.35

Hayden Place - Los Angeles-South Coast County, Summer

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

tblLandUse	LandUseSquareFeet	300,000.00	310,000.00
tblLandUse	LandUseSquareFeet	36,154.80	36,334.00
tblLandUse	LotAcreage	5.62	1.00
tblLandUse	LotAcreage	6.75	1.00
tblLandUse	LotAcreage	0.83	0.68
tblOffRoadEquipment	UsageHours	7.00	8.00
tblProjectCharacteristics	CO2IntensityFactor	390.98	353.92
tblTripsAndVMT	HaulingTripNumber	314.00	0.00
tblTripsAndVMT	VendorTripNumber	97.00	0.00
tblTripsAndVMT	VendorTripNumber	97.00	0.00
tblTripsAndVMT	WorkerTripNumber	20.00	0.00
tblTripsAndVMT	WorkerTripNumber	13.00	0.00
tblTripsAndVMT	WorkerTripNumber	23.00	0.00
tblTripsAndVMT	WorkerTripNumber	20.00	0.00
tblTripsAndVMT	WorkerTripNumber	15.00	0.00
tblTripsAndVMT	WorkerTripNumber	224.00	0.00
tblTripsAndVMT	WorkerTripNumber	224.00	0.00
tblTripsAndVMT	WorkerTripNumber	45.00	0.00
tblWater	OutdoorWaterUseRate	988,929.52	212,589.00
tblWater	OutdoorWaterUseRate	26,688,728.93	0.00

**2.0 Emissions Summary**

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Hayden Place - Los Angeles-South Coast County, Summer

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

**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	6.2967	55.1937	68.5648	0.1316	2.6123	2.6589	5.2712	0.3955	2.5225	2.9181	0.0000	12,594.7788	12,594.7788	2.9097	0.0000	12,667.5198
2024	30.4921	19.7056	29.6472	0.0489	0.0000	0.6712	0.6711	0.0000	0.6275	0.6275	0.0000	4,698.3122	4,698.3122	1.3322	0.0000	4,731.6159
<b>Maximum</b>	<b>30.4921</b>	<b>55.1937</b>	<b>68.5648</b>	<b>0.1316</b>	<b>2.6123</b>	<b>2.6589</b>	<b>5.2712</b>	<b>0.3955</b>	<b>2.5225</b>	<b>2.9181</b>	<b>0.0000</b>	<b>12,594.7788</b>	<b>12,594.7788</b>	<b>2.9097</b>	<b>0.0000</b>	<b>12,667.5198</b>

**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	2.3623	66.1626	85.3834	0.1316	1.0188	4.1417	5.1605	0.1543	4.1821	4.3363	0.0000	12,594.7788	12,594.7788	2.9097	0.0000	12,667.5198
2024	30.3551	21.8094	30.6949	0.0402	0.0000	1.5802	1.5802	0.0000	1.5860	1.5860	0.0000	3,860.1012	3,860.1012	1.0613	0.0000	3,886.6276
<b>Maximum</b>	<b>30.3551</b>	<b>66.1626</b>	<b>85.3834</b>	<b>0.1316</b>	<b>1.0188</b>	<b>4.1417</b>	<b>5.1605</b>	<b>0.1543</b>	<b>4.1821</b>	<b>4.3363</b>	<b>0.0000</b>	<b>12,594.7788</b>	<b>12,594.7788</b>	<b>2.9097</b>	<b>0.0000</b>	<b>12,667.5198</b>

## Hayden Place - Los Angeles-South Coast County, Summer

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	11.07	-17.45	-18.19	4.79	61.00	-71.83	-13.43	61.00	-83.11	-67.04	0.00	4.85	4.85	6.38	0.00	4.86

Hayden Place - Los Angeles-South Coast County, Summer

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

**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	5.6179	9.2000e-004	0.1015	1.0000e-005		3.6000e-004	3.6000e-004		3.6000e-004	3.6000e-004		0.2179	0.2179	5.7000e-004		0.2322
Energy	0.0746	0.6785	0.5699	4.0700e-003		0.0516	0.0516		0.0516	0.0516		814.1660	814.1660	0.0156	0.0149	819.0042
Mobile	6.9874	6.9837	70.2147	0.1551	16.1956	0.1108	16.3064	4.3140	0.1028	4.4168		16,088.2026	16,088.2026	1.0392	0.6386	16,304.4900
<b>Total</b>	<b>12.6800</b>	<b>7.6631</b>	<b>70.8861</b>	<b>0.1592</b>	<b>16.1956</b>	<b>0.1627</b>	<b>16.3583</b>	<b>4.3140</b>	<b>0.1547</b>	<b>4.4688</b>		<b>16,902.5865</b>	<b>16,902.5865</b>	<b>1.0554</b>	<b>0.6536</b>	<b>17,123.7264</b>

**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	5.6179	9.2000e-004	0.1015	1.0000e-005		3.6000e-004	3.6000e-004		3.6000e-004	3.6000e-004		0.2179	0.2179	5.7000e-004		0.2322
Energy	0.0746	0.6785	0.5699	4.0700e-003		0.0516	0.0516		0.0516	0.0516		814.1660	814.1660	0.0156	0.0149	819.0042
Mobile	6.9874	6.9837	70.2147	0.1551	16.1956	0.1108	16.3064	4.3140	0.1028	4.4168		16,088.2026	16,088.2026	1.0392	0.6386	16,304.4900
<b>Total</b>	<b>12.6800</b>	<b>7.6631</b>	<b>70.8861</b>	<b>0.1592</b>	<b>16.1956</b>	<b>0.1627</b>	<b>16.3583</b>	<b>4.3140</b>	<b>0.1547</b>	<b>4.4688</b>		<b>16,902.5865</b>	<b>16,902.5865</b>	<b>1.0554</b>	<b>0.6536</b>	<b>17,123.7264</b>

Hayden Place - Los Angeles-South Coast County, Summer

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

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

**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	4/1/2023	5/1/2023	6	26	
2	Site Preparation	Site Preparation	5/1/2023	5/31/2023	6	27	
3	Grading	Grading	5/1/2023	7/1/2023	6	54	
4	Drainage/Utilities/Trenching	Trenching	5/1/2023	8/15/2023	6	92	
5	Foundations/Concrete Pour	Grading	8/15/2023	9/1/2023	6	16	
6	Exterior Construction	Building Construction	9/1/2023	6/1/2024	6	236	
7	Interior Construction	Building Construction	10/1/2023	9/1/2024	6	288	
8	Paving	Architectural Coating	7/1/2024	10/1/2024	6	80	

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 0**

**Acres of Paving: 1**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 367,500; Non-Residential Outdoor: 122,500; Striped Parking Area: 18,600 (Architectural Coating – sqft)**

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Air Compressors	1	8.00	78	0.48
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Crushing/Proc. Equipment	1	8.00	85	0.78



Hayden Place - Los Angeles-South Coast County, Summer

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

Demolition	Excavators	1	8.00	158	0.38
Demolition	Generator Sets	2	8.00	84	0.74
Demolition	Rubber Tired Loaders	1	8.00	203	0.36
Demolition	Sweepers/Scrubbers	1	8.00	64	0.46
Site Preparation	Crushing/Proc. Equipment	1	8.00	85	0.78
Site Preparation	Generator Sets	1	8.00	84	0.74
Site Preparation	Rubber Tired Loaders	1	8.00	203	0.36
Site Preparation	Sweepers/Scrubbers	1	8.00	64	0.46
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Bore/Drill Rigs	2	8.00	221	0.50
Grading	Excavators	2	8.00	158	0.38
Grading	Plate Compactors	1	8.00	8	0.43
Grading	Rubber Tired Loaders	1	8.00	203	0.36
Grading	Sweepers/Scrubbers	1	8.00	64	0.46
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Drainage/Utilities/Trenching	Cement and Mortar Mixers	2	8.00	9	0.56
Drainage/Utilities/Trenching	Skid Steer Loaders	2	8.00	65	0.37
Drainage/Utilities/Trenching	Sweepers/Scrubbers	1	8.00	64	0.46
Drainage/Utilities/Trenching	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Drainage/Utilities/Trenching	Trenchers	1	8.00	78	0.50
Foundations/Concrete Pour	Cranes	1	8.00	231	0.29
Foundations/Concrete Pour	Dumpers/Tenders	1	8.00	16	0.38
Foundations/Concrete Pour	Generator Sets	1	8.00	84	0.74
Foundations/Concrete Pour	Rough Terrain Forklifts	1	8.00	100	0.40
Foundations/Concrete Pour	Skid Steer Loaders	1	8.00	65	0.37
Foundations/Concrete Pour	Sweepers/Scrubbers	1	8.00	64	0.46
Exterior Construction	Cranes	1	8.00	231	0.29
Exterior Construction	Generator Sets	1	8.00	84	0.74
Exterior Construction	Rough Terrain Forklifts	1	8.00	100	0.40

Hayden Place - Los Angeles-South Coast County, Summer

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

Exterior Construction	Skid Steer Loaders	1	8.00	65	0.37
Exterior Construction	Sweepers/Scrubbers	1	8.00	64	0.46
Interior Construction	Aerial Lifts	15	8.00	63	0.31
Interior Construction	Cement and Mortar Mixers	1	8.00	9	0.56
Interior Construction	Sweepers/Scrubbers	1	8.00	64	0.46
Paving	Rough Terrain Forklifts	1	8.00	100	0.40
Paving	Sweepers/Scrubbers	1	8.00	64	0.46

**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	8	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	5	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	9	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Drainage/Utilities/Trenching	8	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Foundations/Concrete Pour	6	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Exterior Construction	5	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Interior Construction	17	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	2	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

- Use Alternative Fuel for Construction Equipment
- Use Cleaner Engines for Construction Equipment
- Water Exposed Area
- Reduce Vehicle Speed on Unpaved Roads

Hayden Place - Los Angeles-South Coast County, Summer

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

**3.2 Demolition - 2023**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive 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					2.6123	0.0000	2.6123	0.3955	0.0000	0.3955			0.0000			0.0000
Off-Road	2.2924	18.6460	24.4235	0.0444		0.9071	0.9071		0.8852	0.8852		4,230.372 2	4,230.372 2	0.5834		4,244.958 1
<b>Total</b>	<b>2.2924</b>	<b>18.6460</b>	<b>24.4235</b>	<b>0.0444</b>	<b>2.6123</b>	<b>0.9071</b>	<b>3.5194</b>	<b>0.3955</b>	<b>0.8852</b>	<b>1.2807</b>		<b>4,230.372 2</b>	<b>4,230.372 2</b>	<b>0.5834</b>		<b>4,244.958 1</b>

**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

Hayden Place - Los Angeles-South Coast County, Summer

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

**3.2 Demolition - 2023**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.0188	0.0000	1.0188	0.1543	0.0000	0.1543			0.0000			0.0000
Off-Road	0.7058	20.9355	28.1147	0.0444		1.3695	1.3695		1.3695	1.3695	0.0000	4,230.372 2	4,230.372 2	0.5834		4,244.958 1
<b>Total</b>	<b>0.7058</b>	<b>20.9355</b>	<b>28.1147</b>	<b>0.0444</b>	<b>1.0188</b>	<b>1.3695</b>	<b>2.3883</b>	<b>0.1543</b>	<b>1.3695</b>	<b>1.5237</b>	<b>0.0000</b>	<b>4,230.372 2</b>	<b>4,230.372 2</b>	<b>0.5834</b>		<b>4,244.958 1</b>

**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

Hayden Place - Los Angeles-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule 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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	1.3600	11.5959	13.6556	0.0255		0.5561	0.5561		0.5343	0.5343		2,440.8787	2,440.8787	0.4402		2,451.8830
<b>Total</b>	<b>1.3600</b>	<b>11.5959</b>	<b>13.6556</b>	<b>0.0255</b>	<b>0.0000</b>	<b>0.5561</b>	<b>0.5561</b>	<b>0.0000</b>	<b>0.5343</b>	<b>0.5343</b>		<b>2,440.8787</b>	<b>2,440.8787</b>	<b>0.4402</b>		<b>2,451.8830</b>

**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

Hayden Place - Los Angeles-South Coast County, Summer

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

**3.3 Site Preparation - 2023**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.4244	12.6911	16.2297	0.0255		0.8501	0.8501		0.8586	0.8586	0.0000	2,440.8787	2,440.8787	0.4402		2,451.8830
<b>Total</b>	<b>0.4244</b>	<b>12.6911</b>	<b>16.2297</b>	<b>0.0255</b>	<b>0.0000</b>	<b>0.8501</b>	<b>0.8501</b>	<b>0.0000</b>	<b>0.8586</b>	<b>0.8586</b>	<b>0.0000</b>	<b>2,440.8787</b>	<b>2,440.8787</b>	<b>0.4402</b>		<b>2,451.8830</b>

**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

Hayden Place - Los Angeles-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule 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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	1.5651	14.4757	18.1249	0.0440		0.6238	0.6238		0.5747	0.5747		4,244.9936	4,244.9936	1.3654		4,279.1272
<b>Total</b>	<b>1.5651</b>	<b>14.4757</b>	<b>18.1249</b>	<b>0.0440</b>	<b>0.0000</b>	<b>0.6238</b>	<b>0.6238</b>	<b>0.0000</b>	<b>0.5747</b>	<b>0.5747</b>		<b>4,244.9936</b>	<b>4,244.9936</b>	<b>1.3654</b>		<b>4,279.1272</b>

**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

Hayden Place - Los Angeles-South Coast County, Summer

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

**3.4 Grading - 2023**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.9272	22.1426	27.8230	0.0440		1.1278	1.1278		1.1427	1.1427	0.0000	4,244.9936	4,244.9936	1.3654		4,279.1272
<b>Total</b>	<b>0.9272</b>	<b>22.1426</b>	<b>27.8230</b>	<b>0.0440</b>	<b>0.0000</b>	<b>1.1278</b>	<b>1.1278</b>	<b>0.0000</b>	<b>1.1427</b>	<b>1.1427</b>	<b>0.0000</b>	<b>4,244.9936</b>	<b>4,244.9936</b>	<b>1.3654</b>		<b>4,279.1272</b>

**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>



Hayden Place - Los Angeles-South Coast County, Summer

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

**3.5 Drainage/Utilities/Trenching - 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	1.0791	10.4761	12.3608	0.0177		0.5719	0.5719		0.5284	0.5284		1,678.534 4	1,678.534 4	0.5207		1,691.551 5
<b>Total</b>	<b>1.0791</b>	<b>10.4761</b>	<b>12.3608</b>	<b>0.0177</b>		<b>0.5719</b>	<b>0.5719</b>		<b>0.5284</b>	<b>0.5284</b>		<b>1,678.534 4</b>	<b>1,678.534 4</b>	<b>0.5207</b>		<b>1,691.551 5</b>

**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

Hayden Place - Los Angeles-South Coast County, Summer

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

**3.5 Drainage/Utilities/Trenching - 2023**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3050	10.3934	13.2160	0.0177		0.7944	0.7944		0.8113	0.8113	0.0000	1,678.534 3	1,678.534 3	0.5207		1,691.551 5
<b>Total</b>	<b>0.3050</b>	<b>10.3934</b>	<b>13.2160</b>	<b>0.0177</b>		<b>0.7944</b>	<b>0.7944</b>		<b>0.8113</b>	<b>0.8113</b>	<b>0.0000</b>	<b>1,678.534 3</b>	<b>1,678.534 3</b>	<b>0.5207</b>		<b>1,691.551 5</b>

**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

Hayden Place - Los Angeles-South Coast County, Summer

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

**3.6 Foundations/Concrete Pour - 2023**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	1.0836	10.9656	11.3458	0.0212		0.4880	0.4880		0.4606	0.4606		2,023.260 2	2,023.260 2	0.4671		2,034.937 7
<b>Total</b>	<b>1.0836</b>	<b>10.9656</b>	<b>11.3458</b>	<b>0.0212</b>	<b>0.0000</b>	<b>0.4880</b>	<b>0.4880</b>	<b>0.0000</b>	<b>0.4606</b>	<b>0.4606</b>		<b>2,023.260 2</b>	<b>2,023.260 2</b>	<b>0.4671</b>		<b>2,034.937 7</b>

**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

Hayden Place - Los Angeles-South Coast County, Summer

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

**3.6 Foundations/Concrete Pour - 2023**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.1923	6.1363	9.5682	0.0125		0.4812	0.4812		0.4876	0.4876	0.0000	1,185.0314	1,185.0314	0.1960		1,189.9314
<b>Total</b>	<b>0.1923</b>	<b>6.1363</b>	<b>9.5682</b>	<b>0.0125</b>	<b>0.0000</b>	<b>0.4812</b>	<b>0.4812</b>	<b>0.0000</b>	<b>0.4876</b>	<b>0.4876</b>	<b>0.0000</b>	<b>1,185.0314</b>	<b>1,185.0314</b>	<b>0.1960</b>		<b>1,189.9314</b>

**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

Hayden Place - Los Angeles-South Coast County, Summer

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

**3.7 Exterior 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	1.0102	10.5010	11.0950	0.0204		0.4706	0.4706		0.4432	0.4432		1,962.3199	1,962.3199	0.4606		1,973.8339
<b>Total</b>	<b>1.0102</b>	<b>10.5010</b>	<b>11.0950</b>	<b>0.0204</b>		<b>0.4706</b>	<b>0.4706</b>		<b>0.4432</b>	<b>0.4432</b>		<b>1,962.3199</b>	<b>1,962.3199</b>	<b>0.4606</b>		<b>1,973.8339</b>

**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

Hayden Place - Los Angeles-South Coast County, Summer

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

**3.7 Exterior Construction - 2023**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1189	5.6717	9.3174	0.0118		0.4639	0.4639		0.4702	0.4702	0.0000	1,124.0910	1,124.0910	0.1895		1,128.8275
<b>Total</b>	<b>0.1189</b>	<b>5.6717</b>	<b>9.3174</b>	<b>0.0118</b>		<b>0.4639</b>	<b>0.4639</b>		<b>0.4702</b>	<b>0.4702</b>	<b>0.0000</b>	<b>1,124.0910</b>	<b>1,124.0910</b>	<b>0.1895</b>		<b>1,128.8275</b>

**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

Hayden Place - Los Angeles-South Coast County, Summer

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

**3.7 Exterior 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	0.9539	9.8344	11.0296	0.0204		0.4221	0.4221		0.3972	0.3972		1,962.3218	1,962.3218	0.4584		1,973.7810
<b>Total</b>	<b>0.9539</b>	<b>9.8344</b>	<b>11.0296</b>	<b>0.0204</b>		<b>0.4221</b>	<b>0.4221</b>		<b>0.3972</b>	<b>0.3972</b>		<b>1,962.3218</b>	<b>1,962.3218</b>	<b>0.4584</b>		<b>1,973.7810</b>

**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

Hayden Place - Los Angeles-South Coast County, Summer

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

**3.7 Exterior Construction - 2024**

**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	0.1329	5.8616	9.3484	0.0118		0.4741	0.4741		0.4800	0.4800	0.0000	1,124.1108	1,124.1108	0.1873		1,128.7926
<b>Total</b>	<b>0.1329</b>	<b>5.8616</b>	<b>9.3484</b>	<b>0.0118</b>		<b>0.4741</b>	<b>0.4741</b>		<b>0.4800</b>	<b>0.4800</b>	<b>0.0000</b>	<b>1,124.1108</b>	<b>1,124.1108</b>	<b>0.1873</b>		<b>1,128.7926</b>

**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>



Hayden Place - Los Angeles-South Coast County, Summer

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

**3.8 Interior 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	0.7600	10.0727	18.6070	0.0285		0.2613	0.2613		0.2415	0.2415		2,735.9904	2,735.9904	0.8738		2,757.8350
<b>Total</b>	<b>0.7600</b>	<b>10.0727</b>	<b>18.6070</b>	<b>0.0285</b>		<b>0.2613</b>	<b>0.2613</b>		<b>0.2415</b>	<b>0.2415</b>		<b>2,735.9904</b>	<b>2,735.9904</b>	<b>0.8738</b>		<b>2,757.8350</b>

**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

Hayden Place - Los Angeles-South Coast County, Summer

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

**3.8 Interior Construction - 2023**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7411	15.9478	21.3465	0.0285		1.1060	1.1060		1.1060	1.1060	0.0000	2,735.9904	2,735.9904	0.8738		2,757.8350
<b>Total</b>	<b>0.7411</b>	<b>15.9478</b>	<b>21.3465</b>	<b>0.0285</b>		<b>1.1060</b>	<b>1.1060</b>		<b>1.1060</b>	<b>1.1060</b>	<b>0.0000</b>	<b>2,735.9904</b>	<b>2,735.9904</b>	<b>0.8738</b>		<b>2,757.8350</b>

**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

Hayden Place - Los Angeles-South Coast County, Summer

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

**3.8 Interior 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	0.7503	9.8712	18.6176	0.0285		0.2491	0.2491		0.2303	0.2303		2,735.9904	2,735.9904	0.8738		2,757.8350
<b>Total</b>	<b>0.7503</b>	<b>9.8712</b>	<b>18.6176</b>	<b>0.0285</b>		<b>0.2491</b>	<b>0.2491</b>		<b>0.2303</b>	<b>0.2303</b>		<b>2,735.9904</b>	<b>2,735.9904</b>	<b>0.8738</b>		<b>2,757.8350</b>

**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

Hayden Place - Los Angeles-South Coast County, Summer

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

**3.8 Interior Construction - 2024**

**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	0.7411	15.9478	21.3465	0.0285		1.1060	1.1060		1.1060	1.1060	0.0000	2,735.990 4	2,735.990 4	0.8738		2,757.835 0
<b>Total</b>	<b>0.7411</b>	<b>15.9478</b>	<b>21.3465</b>	<b>0.0285</b>		<b>1.1060</b>	<b>1.1060</b>		<b>1.1060</b>	<b>1.1060</b>	<b>0.0000</b>	<b>2,735.990 4</b>	<b>2,735.990 4</b>	<b>0.8738</b>		<b>2,757.835 0</b>

**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

Hayden Place - Los Angeles-South Coast County, Summer

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

**3.9 Paving - 2024**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	29.4670					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2748	2.9591	4.2065	5.9900e-003		0.1390	0.1390		0.1279	0.1279		579.9126	579.9126	0.1876		584.6015
<b>Total</b>	<b>29.7418</b>	<b>2.9591</b>	<b>4.2065</b>	<b>5.9900e-003</b>		<b>0.1390</b>	<b>0.1390</b>		<b>0.1279</b>	<b>0.1279</b>		<b>579.9126</b>	<b>579.9126</b>	<b>0.1876</b>		<b>584.6015</b>

**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

Hayden Place - Los Angeles-South Coast County, Summer

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

**3.9 Paving - 2024**

**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	29.4670					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1470	3.3557	4.5314	5.9900e-003		0.2351	0.2351		0.2351	0.2351	0.0000	579.9126	579.9126	0.1876		584.6015
<b>Total</b>	<b>29.6140</b>	<b>3.3557</b>	<b>4.5314</b>	<b>5.9900e-003</b>		<b>0.2351</b>	<b>0.2351</b>		<b>0.2351</b>	<b>0.2351</b>	<b>0.0000</b>	<b>579.9126</b>	<b>579.9126</b>	<b>0.1876</b>		<b>584.6015</b>

**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

Hayden Place - Los Angeles-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule 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	6.9874	6.9837	70.2147	0.1551	16.1956	0.1108	16.3064	4.3140	0.1028	4.4168		16,088.20 26	16,088.20 26	1.0392	0.6386	16,304.49 00
Unmitigated	6.9874	6.9837	70.2147	0.1551	16.1956	0.1108	16.3064	4.3140	0.1028	4.4168		16,088.20 26	16,088.20 26	1.0392	0.6386	16,304.49 00

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.65	1.63	1.82	2,747	2,747
Enclosed Parking with Elevator	0.00	0.00	0.00		
General Office Building	2,386.30	541.45	171.50	5,819,086	5,819,086
<b>Total</b>	<b>2,386.95</b>	<b>543.08</b>	<b>173.32</b>	<b>5,821,833</b>	<b>5,821,833</b>

**4.3 Trip Type Information**

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4

Hayden Place - Los Angeles-South Coast County, Summer

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

**4.4 Fleet Mix**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.542464	0.063735	0.188241	0.126899	0.023249	0.006239	0.010717	0.008079	0.000923	0.000604	0.024795	0.000702	0.003352
Enclosed Parking with Elevator	0.542464	0.063735	0.188241	0.126899	0.023249	0.006239	0.010717	0.008079	0.000923	0.000604	0.024795	0.000702	0.003352
General Office Building	0.542464	0.063735	0.188241	0.126899	0.023249	0.006239	0.010717	0.008079	0.000923	0.000604	0.024795	0.000702	0.003352

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day										lb/day					
NaturalGas Mitigated	0.0746	0.6785	0.5699	4.0700e-003		0.0516	0.0516		0.0516	0.0516		814.1660	814.1660	0.0156	0.0149	819.0042
NaturalGas Unmitigated	0.0746	0.6785	0.5699	4.0700e-003		0.0516	0.0516		0.0516	0.0516		814.1660	814.1660	0.0156	0.0149	819.0042



Hayden Place - Los Angeles-South Coast County, Summer

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

**5.2 Energy by Land Use - Natural Gas**

**Unmitigated**

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
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
General Office Building	6920.41	0.0746	0.6785	0.5699	4.0700e-003		0.0516	0.0516		0.0516	0.0516		814.1660	814.1660	0.0156	0.0149	819.0042
<b>Total</b>		<b>0.0746</b>	<b>0.6785</b>	<b>0.5699</b>	<b>4.0700e-003</b>		<b>0.0516</b>	<b>0.0516</b>		<b>0.0516</b>	<b>0.0516</b>		<b>814.1660</b>	<b>814.1660</b>	<b>0.0156</b>	<b>0.0149</b>	<b>819.0042</b>

Hayden Place - Los Angeles-South Coast County, Summer

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

**5.2 Energy by Land Use - NaturalGas**

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
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
General Office Building	6.92041	0.0746	0.6785	0.5699	4.0700e-003		0.0516	0.0516		0.0516	0.0516		814.1660	814.1660	0.0156	0.0149	819.0042
<b>Total</b>		<b>0.0746</b>	<b>0.6785</b>	<b>0.5699</b>	<b>4.0700e-003</b>		<b>0.0516</b>	<b>0.0516</b>		<b>0.0516</b>	<b>0.0516</b>		<b>814.1660</b>	<b>814.1660</b>	<b>0.0156</b>	<b>0.0149</b>	<b>819.0042</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

Hayden Place - Los Angeles-South Coast County, Summer

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	5.6179	9.2000e-004	0.1015	1.0000e-005		3.6000e-004	3.6000e-004		3.6000e-004	3.6000e-004		0.2179	0.2179	5.7000e-004		0.2322
Unmitigated	5.6179	9.2000e-004	0.1015	1.0000e-005		3.6000e-004	3.6000e-004		3.6000e-004	3.6000e-004		0.2179	0.2179	5.7000e-004		0.2322

**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	0.6459					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.9627					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	9.3700e-003	9.2000e-004	0.1015	1.0000e-005		3.6000e-004	3.6000e-004		3.6000e-004	3.6000e-004		0.2179	0.2179	5.7000e-004		0.2322
<b>Total</b>	<b>5.6179</b>	<b>9.2000e-004</b>	<b>0.1015</b>	<b>1.0000e-005</b>		<b>3.6000e-004</b>	<b>3.6000e-004</b>		<b>3.6000e-004</b>	<b>3.6000e-004</b>		<b>0.2179</b>	<b>0.2179</b>	<b>5.7000e-004</b>		<b>0.2322</b>

Hayden Place - Los Angeles-South Coast County, Summer

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

**6.2 Area by SubCategory**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.6459					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.9627					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	9.3700e-003	9.2000e-004	0.1015	1.0000e-005		3.6000e-004	3.6000e-004		3.6000e-004	3.6000e-004		0.2179	0.2179	5.7000e-004		0.2322
<b>Total</b>	<b>5.6179</b>	<b>9.2000e-004</b>	<b>0.1015</b>	<b>1.0000e-005</b>		<b>3.6000e-004</b>	<b>3.6000e-004</b>		<b>3.6000e-004</b>	<b>3.6000e-004</b>		<b>0.2179</b>	<b>0.2179</b>	<b>5.7000e-004</b>		<b>0.2322</b>

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

Hayden Place - Los Angeles-South Coast County, Summer

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

**8.0 Waste Detail**

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**8.1 Mitigation Measures Waste**

**9.0 Operational Offroad**

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

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**Fire Pumps and Emergency Generators**

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

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

Equipment Type	Number
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**11.0 Vegetation**

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Hayden Place - Los Angeles-South Coast County, Winter

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

**Hayden Place**

**Los Angeles-South Coast County, Winter**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	245.00	1000sqft	1.00	245,000.00	0
Enclosed Parking with Elevator	750.00	Space	1.00	310,000.00	0
City Park	0.83	Acre	0.68	36,334.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	33
<b>Climate Zone</b>	11			<b>Operational Year</b>	2024
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MWhr)</b>	353.92	<b>CH4 Intensity (lb/MWhr)</b>	0.033	<b>N2O Intensity (lb/MWhr)</b>	0.004

**1.3 User Entered Comments & Non-Default Data**

Project Characteristics - Adjusted CO2e based off of Power Content Label

Land Use - See Construction Assumptions

Construction Phase - See Construction Assumptions

Off-road Equipment - See Construction Equipment

Off-road Equipment - See Construction Assumptions

Off-road Equipment - See Construction Assumptions

Off-road Equipment - See Construction Assumptions

Off-road Equipment - See Construction Assumptions

Off-road Equipment - See Construction Assumptions

Off-road Equipment - See Construction Assumptions

Hayden Place - Los Angeles-South Coast County, Winter

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

Off-road Equipment - See Construction Assumptions

Trips and VMT - On-road vehicles calculated on spreadsheet

Demolition -

Grading - See Construction Assumptions

Architectural Coating -

Area Coating -

Energy Use - Added Lighting Intensity for City parking area

Water And Wastewater - Use Irrigation Calculation Information

Solid Waste -

Construction Off-road Equipment Mitigation - See Construction Assumptions

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	FuelType	Diesel	Electrical
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	15.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	12.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 3

Hayden Place - Los Angeles-South Coast County, Winter

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

tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	10.00	80.00
tblConstructionPhase	NumDays	220.00	236.00
tblConstructionPhase	NumDays	220.00	288.00
tblConstructionPhase	NumDays	20.00	26.00
tblConstructionPhase	NumDays	6.00	54.00
tblConstructionPhase	NumDays	6.00	16.00
tblConstructionPhase	NumDays	3.00	27.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblEnergyUse	LightingElect	0.00	0.35



Hayden Place - Los Angeles-South Coast County, Winter

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

tblLandUse	LandUseSquareFeet	300,000.00	310,000.00
tblLandUse	LandUseSquareFeet	36,154.80	36,334.00
tblLandUse	LotAcreage	5.62	1.00
tblLandUse	LotAcreage	6.75	1.00
tblLandUse	LotAcreage	0.83	0.68
tblOffRoadEquipment	UsageHours	7.00	8.00
tblProjectCharacteristics	CO2IntensityFactor	390.98	353.92
tblTripsAndVMT	HaulingTripNumber	314.00	0.00
tblTripsAndVMT	VendorTripNumber	97.00	0.00
tblTripsAndVMT	VendorTripNumber	97.00	0.00
tblTripsAndVMT	WorkerTripNumber	20.00	0.00
tblTripsAndVMT	WorkerTripNumber	13.00	0.00
tblTripsAndVMT	WorkerTripNumber	23.00	0.00
tblTripsAndVMT	WorkerTripNumber	20.00	0.00
tblTripsAndVMT	WorkerTripNumber	15.00	0.00
tblTripsAndVMT	WorkerTripNumber	224.00	0.00
tblTripsAndVMT	WorkerTripNumber	224.00	0.00
tblTripsAndVMT	WorkerTripNumber	45.00	0.00
tblWater	OutdoorWaterUseRate	988,929.52	212,589.00
tblWater	OutdoorWaterUseRate	26,688,728.93	0.00

**2.0 Emissions Summary**

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Hayden Place - Los Angeles-South Coast County, Winter

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

**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	6.2967	55.1937	68.5648	0.1316	2.6123	2.6589	5.2712	0.3955	2.5225	2.9181	0.0000	12,594.7788	12,594.7788	2.9097	0.0000	12,667.5198
2024	30.4921	19.7056	29.6472	0.0489	0.0000	0.6712	0.6711	0.0000	0.6275	0.6275	0.0000	4,698.3122	4,698.3122	1.3322	0.0000	4,731.6159
<b>Maximum</b>	<b>30.4921</b>	<b>55.1937</b>	<b>68.5648</b>	<b>0.1316</b>	<b>2.6123</b>	<b>2.6589</b>	<b>5.2712</b>	<b>0.3955</b>	<b>2.5225</b>	<b>2.9181</b>	<b>0.0000</b>	<b>12,594.7788</b>	<b>12,594.7788</b>	<b>2.9097</b>	<b>0.0000</b>	<b>12,667.5198</b>

**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	2.3623	66.1626	85.3834	0.1316	1.0188	4.1417	5.1605	0.1543	4.1821	4.3363	0.0000	12,594.7788	12,594.7788	2.9097	0.0000	12,667.5198
2024	30.3551	21.8094	30.6949	0.0402	0.0000	1.5802	1.5802	0.0000	1.5860	1.5860	0.0000	3,860.1012	3,860.1012	1.0613	0.0000	3,886.6276
<b>Maximum</b>	<b>30.3551</b>	<b>66.1626</b>	<b>85.3834</b>	<b>0.1316</b>	<b>1.0188</b>	<b>4.1417</b>	<b>5.1605</b>	<b>0.1543</b>	<b>4.1821</b>	<b>4.3363</b>	<b>0.0000</b>	<b>12,594.7788</b>	<b>12,594.7788</b>	<b>2.9097</b>	<b>0.0000</b>	<b>12,667.5198</b>

## Hayden Place - Los Angeles-South Coast County, Winter

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	11.07	-17.45	-18.19	4.79	61.00	-71.83	-13.43	61.00	-83.11	-67.04	0.00	4.85	4.85	6.38	0.00	4.86

Hayden Place - Los Angeles-South Coast County, Winter

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

**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	5.6179	9.2000e-004	0.1015	1.0000e-005		3.6000e-004	3.6000e-004		3.6000e-004	3.6000e-004		0.2179	0.2179	5.7000e-004		0.2322
Energy	0.0746	0.6785	0.5699	4.0700e-003		0.0516	0.0516		0.0516	0.0516		814.1660	814.1660	0.0156	0.0149	819.0042
Mobile	6.8601	7.5415	68.7660	0.1485	16.1956	0.1108	16.3064	4.3140	0.1029	4.4169		15,405.3723	15,405.3723	1.0692	0.6668	15,630.8220
<b>Total</b>	<b>12.5526</b>	<b>8.2208</b>	<b>69.4375</b>	<b>0.1526</b>	<b>16.1956</b>	<b>0.1627</b>	<b>16.3584</b>	<b>4.3140</b>	<b>0.1548</b>	<b>4.4688</b>		<b>16,219.7562</b>	<b>16,219.7562</b>	<b>1.0854</b>	<b>0.6818</b>	<b>16,450.0583</b>

**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	5.6179	9.2000e-004	0.1015	1.0000e-005		3.6000e-004	3.6000e-004		3.6000e-004	3.6000e-004		0.2179	0.2179	5.7000e-004		0.2322
Energy	0.0746	0.6785	0.5699	4.0700e-003		0.0516	0.0516		0.0516	0.0516		814.1660	814.1660	0.0156	0.0149	819.0042
Mobile	6.8601	7.5415	68.7660	0.1485	16.1956	0.1108	16.3064	4.3140	0.1029	4.4169		15,405.3723	15,405.3723	1.0692	0.6668	15,630.8220
<b>Total</b>	<b>12.5526</b>	<b>8.2208</b>	<b>69.4375</b>	<b>0.1526</b>	<b>16.1956</b>	<b>0.1627</b>	<b>16.3584</b>	<b>4.3140</b>	<b>0.1548</b>	<b>4.4688</b>		<b>16,219.7562</b>	<b>16,219.7562</b>	<b>1.0854</b>	<b>0.6818</b>	<b>16,450.0583</b>

Hayden Place - Los Angeles-South Coast County, Winter

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

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

**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	4/1/2023	5/1/2023	6	26	
2	Site Preparation	Site Preparation	5/1/2023	5/31/2023	6	27	
3	Grading	Grading	5/1/2023	7/1/2023	6	54	
4	Drainage/Utilities/Trenching	Trenching	5/1/2023	8/15/2023	6	92	
5	Foundations/Concrete Pour	Grading	8/15/2023	9/1/2023	6	16	
6	Exterior Construction	Building Construction	9/1/2023	6/1/2024	6	236	
7	Interior Construction	Building Construction	10/1/2023	9/1/2024	6	288	
8	Paving	Architectural Coating	7/1/2024	10/1/2024	6	80	

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 0**

**Acres of Paving: 1**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 367,500; Non-Residential Outdoor: 122,500; Striped Parking Area: 18,600 (Architectural Coating – sqft)**

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Air Compressors	1	8.00	78	0.48
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Crushing/Proc. Equipment	1	8.00	85	0.78

Hayden Place - Los Angeles-South Coast County, Winter

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

Demolition	Excavators	1	8.00	158	0.38
Demolition	Generator Sets	2	8.00	84	0.74
Demolition	Rubber Tired Loaders	1	8.00	203	0.36
Demolition	Sweepers/Scrubbers	1	8.00	64	0.46
Site Preparation	Crushing/Proc. Equipment	1	8.00	85	0.78
Site Preparation	Generator Sets	1	8.00	84	0.74
Site Preparation	Rubber Tired Loaders	1	8.00	203	0.36
Site Preparation	Sweepers/Scrubbers	1	8.00	64	0.46
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Bore/Drill Rigs	2	8.00	221	0.50
Grading	Excavators	2	8.00	158	0.38
Grading	Plate Compactors	1	8.00	8	0.43
Grading	Rubber Tired Loaders	1	8.00	203	0.36
Grading	Sweepers/Scrubbers	1	8.00	64	0.46
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Drainage/Utilities/Trenching	Cement and Mortar Mixers	2	8.00	9	0.56
Drainage/Utilities/Trenching	Skid Steer Loaders	2	8.00	65	0.37
Drainage/Utilities/Trenching	Sweepers/Scrubbers	1	8.00	64	0.46
Drainage/Utilities/Trenching	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Drainage/Utilities/Trenching	Trenchers	1	8.00	78	0.50
Foundations/Concrete Pour	Cranes	1	8.00	231	0.29
Foundations/Concrete Pour	Dumpers/Tenders	1	8.00	16	0.38
Foundations/Concrete Pour	Generator Sets	1	8.00	84	0.74
Foundations/Concrete Pour	Rough Terrain Forklifts	1	8.00	100	0.40
Foundations/Concrete Pour	Skid Steer Loaders	1	8.00	65	0.37
Foundations/Concrete Pour	Sweepers/Scrubbers	1	8.00	64	0.46
Exterior Construction	Cranes	1	8.00	231	0.29
Exterior Construction	Generator Sets	1	8.00	84	0.74
Exterior Construction	Rough Terrain Forklifts	1	8.00	100	0.40

Hayden Place - Los Angeles-South Coast County, Winter

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

Exterior Construction	Skid Steer Loaders	1	8.00	65	0.37
Exterior Construction	Sweepers/Scrubbers	1	8.00	64	0.46
Interior Construction	Aerial Lifts	15	8.00	63	0.31
Interior Construction	Cement and Mortar Mixers	1	8.00	9	0.56
Interior Construction	Sweepers/Scrubbers	1	8.00	64	0.46
Paving	Rough Terrain Forklifts	1	8.00	100	0.40
Paving	Sweepers/Scrubbers	1	8.00	64	0.46

**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	8	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	5	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	9	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Drainage/Utilities/Trenching	8	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Foundations/Concrete Pour	6	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Exterior Construction	5	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Interior Construction	17	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	2	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

- Use Alternative Fuel for Construction Equipment
- Use Cleaner Engines for Construction Equipment
- Water Exposed Area
- Reduce Vehicle Speed on Unpaved Roads

Hayden Place - Los Angeles-South Coast County, Winter

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

**3.2 Demolition - 2023**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive 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					2.6123	0.0000	2.6123	0.3955	0.0000	0.3955			0.0000			0.0000
Off-Road	2.2924	18.6460	24.4235	0.0444		0.9071	0.9071		0.8852	0.8852		4,230.372 2	4,230.372 2	0.5834		4,244.958 1
<b>Total</b>	<b>2.2924</b>	<b>18.6460</b>	<b>24.4235</b>	<b>0.0444</b>	<b>2.6123</b>	<b>0.9071</b>	<b>3.5194</b>	<b>0.3955</b>	<b>0.8852</b>	<b>1.2807</b>		<b>4,230.372 2</b>	<b>4,230.372 2</b>	<b>0.5834</b>		<b>4,244.958 1</b>

**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>



Hayden Place - Los Angeles-South Coast County, Winter

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

**3.2 Demolition - 2023**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.0188	0.0000	1.0188	0.1543	0.0000	0.1543			0.0000			0.0000
Off-Road	0.7058	20.9355	28.1147	0.0444		1.3695	1.3695		1.3695	1.3695	0.0000	4,230.372 2	4,230.372 2	0.5834		4,244.958 1
<b>Total</b>	<b>0.7058</b>	<b>20.9355</b>	<b>28.1147</b>	<b>0.0444</b>	<b>1.0188</b>	<b>1.3695</b>	<b>2.3883</b>	<b>0.1543</b>	<b>1.3695</b>	<b>1.5237</b>	<b>0.0000</b>	<b>4,230.372 2</b>	<b>4,230.372 2</b>	<b>0.5834</b>		<b>4,244.958 1</b>

**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

Hayden Place - Los Angeles-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule 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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	1.3600	11.5959	13.6556	0.0255		0.5561	0.5561		0.5343	0.5343		2,440.8787	2,440.8787	0.4402		2,451.8830
<b>Total</b>	<b>1.3600</b>	<b>11.5959</b>	<b>13.6556</b>	<b>0.0255</b>	<b>0.0000</b>	<b>0.5561</b>	<b>0.5561</b>	<b>0.0000</b>	<b>0.5343</b>	<b>0.5343</b>		<b>2,440.8787</b>	<b>2,440.8787</b>	<b>0.4402</b>		<b>2,451.8830</b>

**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

Hayden Place - Los Angeles-South Coast County, Winter

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

**3.3 Site Preparation - 2023**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.4244	12.6911	16.2297	0.0255		0.8501	0.8501		0.8586	0.8586	0.0000	2,440.8787	2,440.8787	0.4402		2,451.8830
<b>Total</b>	<b>0.4244</b>	<b>12.6911</b>	<b>16.2297</b>	<b>0.0255</b>	<b>0.0000</b>	<b>0.8501</b>	<b>0.8501</b>	<b>0.0000</b>	<b>0.8586</b>	<b>0.8586</b>	<b>0.0000</b>	<b>2,440.8787</b>	<b>2,440.8787</b>	<b>0.4402</b>		<b>2,451.8830</b>

**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

Hayden Place - Los Angeles-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule 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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	1.5651	14.4757	18.1249	0.0440		0.6238	0.6238		0.5747	0.5747		4,244.9936	4,244.9936	1.3654		4,279.1272
<b>Total</b>	<b>1.5651</b>	<b>14.4757</b>	<b>18.1249</b>	<b>0.0440</b>	<b>0.0000</b>	<b>0.6238</b>	<b>0.6238</b>	<b>0.0000</b>	<b>0.5747</b>	<b>0.5747</b>		<b>4,244.9936</b>	<b>4,244.9936</b>	<b>1.3654</b>		<b>4,279.1272</b>

**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

Hayden Place - Los Angeles-South Coast County, Winter

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

**3.4 Grading - 2023**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.9272	22.1426	27.8230	0.0440		1.1278	1.1278		1.1427	1.1427	0.0000	4,244.9936	4,244.9936	1.3654		4,279.1272
<b>Total</b>	<b>0.9272</b>	<b>22.1426</b>	<b>27.8230</b>	<b>0.0440</b>	<b>0.0000</b>	<b>1.1278</b>	<b>1.1278</b>	<b>0.0000</b>	<b>1.1427</b>	<b>1.1427</b>	<b>0.0000</b>	<b>4,244.9936</b>	<b>4,244.9936</b>	<b>1.3654</b>		<b>4,279.1272</b>

**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

Hayden Place - Los Angeles-South Coast County, Winter

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

**3.5 Drainage/Utilities/Trenching - 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	1.0791	10.4761	12.3608	0.0177		0.5719	0.5719		0.5284	0.5284		1,678.534 4	1,678.534 4	0.5207		1,691.551 5
<b>Total</b>	<b>1.0791</b>	<b>10.4761</b>	<b>12.3608</b>	<b>0.0177</b>		<b>0.5719</b>	<b>0.5719</b>		<b>0.5284</b>	<b>0.5284</b>		<b>1,678.534 4</b>	<b>1,678.534 4</b>	<b>0.5207</b>		<b>1,691.551 5</b>

**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

Hayden Place - Los Angeles-South Coast County, Winter

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

**3.5 Drainage/Utilities/Trenching - 2023**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3050	10.3934	13.2160	0.0177		0.7944	0.7944		0.8113	0.8113	0.0000	1,678.5343	1,678.5343	0.5207		1,691.5515
<b>Total</b>	<b>0.3050</b>	<b>10.3934</b>	<b>13.2160</b>	<b>0.0177</b>		<b>0.7944</b>	<b>0.7944</b>		<b>0.8113</b>	<b>0.8113</b>	<b>0.0000</b>	<b>1,678.5343</b>	<b>1,678.5343</b>	<b>0.5207</b>		<b>1,691.5515</b>

**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

Hayden Place - Los Angeles-South Coast County, Winter

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

**3.6 Foundations/Concrete Pour - 2023**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	1.0836	10.9656	11.3458	0.0212		0.4880	0.4880		0.4606	0.4606		2,023.260 2	2,023.260 2	0.4671		2,034.937 7
<b>Total</b>	<b>1.0836</b>	<b>10.9656</b>	<b>11.3458</b>	<b>0.0212</b>	<b>0.0000</b>	<b>0.4880</b>	<b>0.4880</b>	<b>0.0000</b>	<b>0.4606</b>	<b>0.4606</b>		<b>2,023.260 2</b>	<b>2,023.260 2</b>	<b>0.4671</b>		<b>2,034.937 7</b>

**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>



Hayden Place - Los Angeles-South Coast County, Winter

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

**3.6 Foundations/Concrete Pour - 2023**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.1923	6.1363	9.5682	0.0125		0.4812	0.4812		0.4876	0.4876	0.0000	1,185.0314	1,185.0314	0.1960		1,189.9314
<b>Total</b>	<b>0.1923</b>	<b>6.1363</b>	<b>9.5682</b>	<b>0.0125</b>	<b>0.0000</b>	<b>0.4812</b>	<b>0.4812</b>	<b>0.0000</b>	<b>0.4876</b>	<b>0.4876</b>	<b>0.0000</b>	<b>1,185.0314</b>	<b>1,185.0314</b>	<b>0.1960</b>		<b>1,189.9314</b>

**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

Hayden Place - Los Angeles-South Coast County, Winter

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

**3.7 Exterior 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	1.0102	10.5010	11.0950	0.0204		0.4706	0.4706		0.4432	0.4432		1,962.3199	1,962.3199	0.4606		1,973.8339
<b>Total</b>	<b>1.0102</b>	<b>10.5010</b>	<b>11.0950</b>	<b>0.0204</b>		<b>0.4706</b>	<b>0.4706</b>		<b>0.4432</b>	<b>0.4432</b>		<b>1,962.3199</b>	<b>1,962.3199</b>	<b>0.4606</b>		<b>1,973.8339</b>

**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

Hayden Place - Los Angeles-South Coast County, Winter

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

**3.7 Exterior Construction - 2023**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1189	5.6717	9.3174	0.0118		0.4639	0.4639		0.4702	0.4702	0.0000	1,124.0910	1,124.0910	0.1895		1,128.8275
<b>Total</b>	<b>0.1189</b>	<b>5.6717</b>	<b>9.3174</b>	<b>0.0118</b>		<b>0.4639</b>	<b>0.4639</b>		<b>0.4702</b>	<b>0.4702</b>	<b>0.0000</b>	<b>1,124.0910</b>	<b>1,124.0910</b>	<b>0.1895</b>		<b>1,128.8275</b>

**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

Hayden Place - Los Angeles-South Coast County, Winter

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

**3.7 Exterior 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	0.9539	9.8344	11.0296	0.0204		0.4221	0.4221		0.3972	0.3972		1,962.3218	1,962.3218	0.4584		1,973.7810
<b>Total</b>	<b>0.9539</b>	<b>9.8344</b>	<b>11.0296</b>	<b>0.0204</b>		<b>0.4221</b>	<b>0.4221</b>		<b>0.3972</b>	<b>0.3972</b>		<b>1,962.3218</b>	<b>1,962.3218</b>	<b>0.4584</b>		<b>1,973.7810</b>

**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

Hayden Place - Los Angeles-South Coast County, Winter

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

**3.7 Exterior Construction - 2024**

**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	0.1329	5.8616	9.3484	0.0118		0.4741	0.4741		0.4800	0.4800	0.0000	1,124.1108	1,124.1108	0.1873		1,128.7926
<b>Total</b>	<b>0.1329</b>	<b>5.8616</b>	<b>9.3484</b>	<b>0.0118</b>		<b>0.4741</b>	<b>0.4741</b>		<b>0.4800</b>	<b>0.4800</b>	<b>0.0000</b>	<b>1,124.1108</b>	<b>1,124.1108</b>	<b>0.1873</b>		<b>1,128.7926</b>

**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

Hayden Place - Los Angeles-South Coast County, Winter

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

**3.8 Interior 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	0.7600	10.0727	18.6070	0.0285		0.2613	0.2613		0.2415	0.2415		2,735.9904	2,735.9904	0.8738		2,757.8350
<b>Total</b>	<b>0.7600</b>	<b>10.0727</b>	<b>18.6070</b>	<b>0.0285</b>		<b>0.2613</b>	<b>0.2613</b>		<b>0.2415</b>	<b>0.2415</b>		<b>2,735.9904</b>	<b>2,735.9904</b>	<b>0.8738</b>		<b>2,757.8350</b>

**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

Hayden Place - Los Angeles-South Coast County, Winter

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

**3.8 Interior Construction - 2023**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7411	15.9478	21.3465	0.0285		1.1060	1.1060		1.1060	1.1060	0.0000	2,735.9904	2,735.9904	0.8738		2,757.8350
<b>Total</b>	<b>0.7411</b>	<b>15.9478</b>	<b>21.3465</b>	<b>0.0285</b>		<b>1.1060</b>	<b>1.1060</b>		<b>1.1060</b>	<b>1.1060</b>	<b>0.0000</b>	<b>2,735.9904</b>	<b>2,735.9904</b>	<b>0.8738</b>		<b>2,757.8350</b>

**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

Hayden Place - Los Angeles-South Coast County, Winter

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

**3.8 Interior 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	0.7503	9.8712	18.6176	0.0285		0.2491	0.2491		0.2303	0.2303		2,735.9904	2,735.9904	0.8738		2,757.8350
<b>Total</b>	<b>0.7503</b>	<b>9.8712</b>	<b>18.6176</b>	<b>0.0285</b>		<b>0.2491</b>	<b>0.2491</b>		<b>0.2303</b>	<b>0.2303</b>		<b>2,735.9904</b>	<b>2,735.9904</b>	<b>0.8738</b>		<b>2,757.8350</b>

**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>



Hayden Place - Los Angeles-South Coast County, Winter

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

**3.8 Interior Construction - 2024**

**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	0.7411	15.9478	21.3465	0.0285		1.1060	1.1060		1.1060	1.1060	0.0000	2,735.9904	2,735.9904	0.8738		2,757.8350
<b>Total</b>	<b>0.7411</b>	<b>15.9478</b>	<b>21.3465</b>	<b>0.0285</b>		<b>1.1060</b>	<b>1.1060</b>		<b>1.1060</b>	<b>1.1060</b>	<b>0.0000</b>	<b>2,735.9904</b>	<b>2,735.9904</b>	<b>0.8738</b>		<b>2,757.8350</b>

**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

Hayden Place - Los Angeles-South Coast County, Winter

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

**3.9 Paving - 2024**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	29.4670					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2748	2.9591	4.2065	5.9900e-003		0.1390	0.1390		0.1279	0.1279		579.9126	579.9126	0.1876		584.6015
<b>Total</b>	<b>29.7418</b>	<b>2.9591</b>	<b>4.2065</b>	<b>5.9900e-003</b>		<b>0.1390</b>	<b>0.1390</b>		<b>0.1279</b>	<b>0.1279</b>		<b>579.9126</b>	<b>579.9126</b>	<b>0.1876</b>		<b>584.6015</b>

**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

Hayden Place - Los Angeles-South Coast County, Winter

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

**3.9 Paving - 2024**

**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	29.4670					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1470	3.3557	4.5314	5.9900e-003		0.2351	0.2351		0.2351	0.2351	0.0000	579.9126	579.9126	0.1876		584.6015
<b>Total</b>	<b>29.6140</b>	<b>3.3557</b>	<b>4.5314</b>	<b>5.9900e-003</b>		<b>0.2351</b>	<b>0.2351</b>		<b>0.2351</b>	<b>0.2351</b>	<b>0.0000</b>	<b>579.9126</b>	<b>579.9126</b>	<b>0.1876</b>		<b>584.6015</b>

**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

Hayden Place - Los Angeles-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule 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	6.8601	7.5415	68.7660	0.1485	16.1956	0.1108	16.3064	4.3140	0.1029	4.4169		15,405.37 23	15,405.37 23	1.0692	0.6668	15,630.82 20
Unmitigated	6.8601	7.5415	68.7660	0.1485	16.1956	0.1108	16.3064	4.3140	0.1029	4.4169		15,405.37 23	15,405.37 23	1.0692	0.6668	15,630.82 20

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.65	1.63	1.82	2,747	2,747
Enclosed Parking with Elevator	0.00	0.00	0.00		
General Office Building	2,386.30	541.45	171.50	5,819,086	5,819,086
<b>Total</b>	<b>2,386.95</b>	<b>543.08</b>	<b>173.32</b>	<b>5,821,833</b>	<b>5,821,833</b>

**4.3 Trip Type Information**

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4

Hayden Place - Los Angeles-South Coast County, Winter

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

**4.4 Fleet Mix**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.542464	0.063735	0.188241	0.126899	0.023249	0.006239	0.010717	0.008079	0.000923	0.000604	0.024795	0.000702	0.003352
Enclosed Parking with Elevator	0.542464	0.063735	0.188241	0.126899	0.023249	0.006239	0.010717	0.008079	0.000923	0.000604	0.024795	0.000702	0.003352
General Office Building	0.542464	0.063735	0.188241	0.126899	0.023249	0.006239	0.010717	0.008079	0.000923	0.000604	0.024795	0.000702	0.003352

**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	0.0746	0.6785	0.5699	4.0700e-003		0.0516	0.0516		0.0516	0.0516		814.1660	814.1660	0.0156	0.0149	819.0042
NaturalGas Unmitigated	0.0746	0.6785	0.5699	4.0700e-003		0.0516	0.0516		0.0516	0.0516		814.1660	814.1660	0.0156	0.0149	819.0042

Hayden Place - Los Angeles-South Coast County, Winter

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

**5.2 Energy by Land Use - Natural Gas**

**Unmitigated**

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
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
General Office Building	6920.41	0.0746	0.6785	0.5699	4.0700e-003		0.0516	0.0516		0.0516	0.0516		814.1660	814.1660	0.0156	0.0149	819.0042
<b>Total</b>		<b>0.0746</b>	<b>0.6785</b>	<b>0.5699</b>	<b>4.0700e-003</b>		<b>0.0516</b>	<b>0.0516</b>		<b>0.0516</b>	<b>0.0516</b>		<b>814.1660</b>	<b>814.1660</b>	<b>0.0156</b>	<b>0.0149</b>	<b>819.0042</b>

Hayden Place - Los Angeles-South Coast County, Winter

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

**5.2 Energy by Land Use - NaturalGas**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
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
General Office Building	6.92041	0.0746	0.6785	0.5699	4.0700e-003		0.0516	0.0516		0.0516	0.0516		814.1660	814.1660	0.0156	0.0149	819.0042
<b>Total</b>		<b>0.0746</b>	<b>0.6785</b>	<b>0.5699</b>	<b>4.0700e-003</b>		<b>0.0516</b>	<b>0.0516</b>		<b>0.0516</b>	<b>0.0516</b>		<b>814.1660</b>	<b>814.1660</b>	<b>0.0156</b>	<b>0.0149</b>	<b>819.0042</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

Hayden Place - Los Angeles-South Coast County, Winter

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	5.6179	9.2000e-004	0.1015	1.0000e-005		3.6000e-004	3.6000e-004		3.6000e-004	3.6000e-004		0.2179	0.2179	5.7000e-004		0.2322
Unmitigated	5.6179	9.2000e-004	0.1015	1.0000e-005		3.6000e-004	3.6000e-004		3.6000e-004	3.6000e-004		0.2179	0.2179	5.7000e-004		0.2322

**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	0.6459					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.9627					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	9.3700e-003	9.2000e-004	0.1015	1.0000e-005		3.6000e-004	3.6000e-004		3.6000e-004	3.6000e-004		0.2179	0.2179	5.7000e-004		0.2322
<b>Total</b>	<b>5.6179</b>	<b>9.2000e-004</b>	<b>0.1015</b>	<b>1.0000e-005</b>		<b>3.6000e-004</b>	<b>3.6000e-004</b>		<b>3.6000e-004</b>	<b>3.6000e-004</b>		<b>0.2179</b>	<b>0.2179</b>	<b>5.7000e-004</b>		<b>0.2322</b>



Hayden Place - Los Angeles-South Coast County, Winter

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

**6.2 Area by SubCategory**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.6459					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.9627					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	9.3700e-003	9.2000e-004	0.1015	1.0000e-005		3.6000e-004	3.6000e-004		3.6000e-004	3.6000e-004		0.2179	0.2179	5.7000e-004		0.2322
<b>Total</b>	<b>5.6179</b>	<b>9.2000e-004</b>	<b>0.1015</b>	<b>1.0000e-005</b>		<b>3.6000e-004</b>	<b>3.6000e-004</b>		<b>3.6000e-004</b>	<b>3.6000e-004</b>		<b>0.2179</b>	<b>0.2179</b>	<b>5.7000e-004</b>		<b>0.2322</b>

**7.0 Water Detail**

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**7.1 Mitigation Measures Water**

Hayden Place - Los Angeles-South Coast County, Winter

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

**8.0 Waste Detail**

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**8.1 Mitigation Measures Waste**

**9.0 Operational Offroad**

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

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**Fire Pumps and Emergency Generators**

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

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

Equipment Type	Number
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**11.0 Vegetation**

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8631 Hayden Place - 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**

**8631 Hayden Place  
Los Angeles-South Coast County, Summer**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	8.00	1000sqft	0.60	8,000.00	0
General Light Industry	46.48	1000sqft	1.00	46,480.00	0
General Light Industry	10.00	1000sqft	0.50	10,000.00	0
Parking Lot	85.00	Space	0.58	34,000.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	33
<b>Climate Zone</b>	11			<b>Operational Year</b>	2022
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MWhr)</b>	390.98	<b>CH4 Intensity (lb/MWhr)</b>	0.033	<b>N2O Intensity (lb/MWhr)</b>	0.004

**1.3 User Entered Comments & Non-Default Data**

- Project Characteristics -
- Land Use - See Construction Assumptions
- Construction Phase - See Construction Assumptions
- Grading -
- Energy Use -
- Vehicle Emission Factors -
- Vehicle Emission Factors -
- Vehicle Emission Factors -
- Fleet Mix -

8631 Hayden Place - 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**

Table Name	Column Name	Default Value	New Value
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	12.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstructionPhase	NumDays	10.00	288.00
tblConstructionPhase	NumDays	220.00	236.00
tblConstructionPhase	NumDays	20.00	26.00
tblConstructionPhase	NumDays	6.00	54.00
tblConstructionPhase	NumDays	6.00	80.00
tblConstructionPhase	NumDays	6.00	28.00
tblConstructionPhase	NumDays	10.00	26.00
tblConstructionPhase	NumDays	3.00	27.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00

8631 Hayden Place - 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	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblLandUse	LotAcreage	0.18	0.60
tblLandUse	LotAcreage	0.23	0.50
tblLandUse	LotAcreage	1.07	1.00
tblLandUse	LotAcreage	0.76	0.58

**2.0 Emissions Summary**

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8631 Hayden Place - 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**

**2.1 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	5.5724	57.6253	42.1290	0.0939	16.2142	2.4300	18.6442	7.1428	2.2458	9.3886	0.0000	9,100.5196	9,100.5196	2.6585	0.0578	9,169.8030
2024	4.0501	14.7552	17.7887	0.0356	0.6502	0.6052	1.2554	0.1748	0.5821	0.7568	0.0000	3,362.8893	3,362.8893	0.5454	0.0560	3,391.1673
<b>Maximum</b>	<b>5.5724</b>	<b>57.6253</b>	<b>42.1290</b>	<b>0.0939</b>	<b>16.2142</b>	<b>2.4300</b>	<b>18.6442</b>	<b>7.1428</b>	<b>2.2458</b>	<b>9.3886</b>	<b>0.0000</b>	<b>9,100.5196</b>	<b>9,100.5196</b>	<b>2.6585</b>	<b>0.0578</b>	<b>9,169.8030</b>

**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	5.5724	57.6253	42.1290	0.0939	16.2142	2.4300	18.6442	7.1428	2.2458	9.3886	0.0000	9,100.5196	9,100.5196	2.6585	0.0578	9,169.8030
2024	4.0501	14.7552	17.7887	0.0356	0.6502	0.6052	1.2554	0.1748	0.5821	0.7568	0.0000	3,362.8893	3,362.8893	0.5454	0.0560	3,391.1673
<b>Maximum</b>	<b>5.5724</b>	<b>57.6253</b>	<b>42.1290</b>	<b>0.0939</b>	<b>16.2142</b>	<b>2.4300</b>	<b>18.6442</b>	<b>7.1428</b>	<b>2.2458</b>	<b>9.3886</b>	<b>0.0000</b>	<b>9,100.5196</b>	<b>9,100.5196</b>	<b>2.6585</b>	<b>0.0578</b>	<b>9,169.8030</b>



8631 Hayden Place - 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**

**2.2 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	1.4565	1.4000e-004	0.0153	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0327	0.0327	9.0000e-005		0.0349
Energy	0.0360	0.3271	0.2748	1.9600e-003		0.0249	0.0249		0.0249	0.0249		392.5299	392.5299	7.5200e-003	7.2000e-003	394.8625
Mobile	1.3038	1.5805	14.5815	0.0320	3.1612	0.0262	3.1874	0.8420	0.0244	0.8664		3,261.8526	3,261.8526	0.2038	0.1295	3,305.5290
<b>Total</b>	<b>2.7963</b>	<b>1.9077</b>	<b>14.8716</b>	<b>0.0340</b>	<b>3.1612</b>	<b>0.0511</b>	<b>3.2123</b>	<b>0.8420</b>	<b>0.0493</b>	<b>0.8913</b>		<b>3,654.4152</b>	<b>3,654.4152</b>	<b>0.2114</b>	<b>0.1367</b>	<b>3,700.4263</b>

**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	1.4565	1.4000e-004	0.0153	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0327	0.0327	9.0000e-005		0.0349
Energy	0.0360	0.3271	0.2748	1.9600e-003		0.0249	0.0249		0.0249	0.0249		392.5299	392.5299	7.5200e-003	7.2000e-003	394.8625
Mobile	1.3038	1.5805	14.5815	0.0320	3.1612	0.0262	3.1874	0.8420	0.0244	0.8664		3,261.8526	3,261.8526	0.2038	0.1295	3,305.5290
<b>Total</b>	<b>2.7963</b>	<b>1.9077</b>	<b>14.8716</b>	<b>0.0340</b>	<b>3.1612</b>	<b>0.0511</b>	<b>3.2123</b>	<b>0.8420</b>	<b>0.0493</b>	<b>0.8913</b>		<b>3,654.4152</b>	<b>3,654.4152</b>	<b>0.2114</b>	<b>0.1367</b>	<b>3,700.4263</b>



8631 Hayden Place - 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	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**3.0 Construction Detail**

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	4/1/2023	5/1/2023	6	26	
2	Site Preparation	Site Preparation	5/1/2023	5/31/2023	6	27	
3	Grading	Grading	5/1/2023	7/1/2023	6	54	
4	Drainage/Utilities/Trenching	Grading	5/1/2023	8/1/2023	6	80	
5	Foundation/Concrete Pour	Grading	8/1/2023	9/1/2023	6	28	
6	Exterior Construction	Building Construction	9/1/2023	6/1/2024	6	236	
7	Interior Construction	Architectural Coating	10/1/2023	8/31/2024	6	288	
8	Paving	Paving	9/1/2024	10/1/2024	6	26	

**Acres of Grading (Site Preparation Phase): 40.5**

**Acres of Grading (Grading Phase): 54**

**Acres of Paving: 0.58**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 96,720; Non-Residential Outdoor: 32,240; Striped Parking Area: 2,040 (Architectural Coating – sqft)**

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37

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

Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Scrapers	1	8.00	367	0.48
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Drainage/Utilities/Trenching	Graders	1	8.00	187	0.41
Drainage/Utilities/Trenching	Rubber Tired Dozers	1	8.00	247	0.40
Drainage/Utilities/Trenching	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Foundation/Concrete Pour	Graders	1	8.00	187	0.41
Foundation/Concrete Pour	Rubber Tired Dozers	1	8.00	247	0.40
Foundation/Concrete Pour	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Exterior Construction	Cranes	1	8.00	231	0.29
Exterior Construction	Forklifts	2	7.00	89	0.20
Exterior Construction	Generator Sets	1	8.00	84	0.74
Exterior Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Exterior Construction	Welders	3	8.00	46	0.45
Interior Construction	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
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
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

8631 Hayden Place - 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**

Site Preparation	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Drainage/Utilities/Trenching	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Foundation/Concrete Pour	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Exterior Construction	8	41.00	16.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Interior Construction	1	8.00	0.00	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

**3.1 Mitigation Measures Construction**

**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					
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
<b>Total</b>	<b>1.4725</b>	<b>14.3184</b>	<b>13.4577</b>	<b>0.0241</b>		<b>0.6766</b>	<b>0.6766</b>		<b>0.6328</b>	<b>0.6328</b>		<b>2,324.3959</b>	<b>2,324.3959</b>	<b>0.5893</b>		<b>2,339.1278</b>

8631 Hayden Place - 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 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	0.0416	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
<b>Total</b>	<b>0.0416</b>	<b>0.0290</b>	<b>0.4698</b>	<b>1.2900e-003</b>	<b>0.1453</b>	<b>8.7000e-004</b>	<b>0.1462</b>	<b>0.0385</b>	<b>8.0000e-004</b>	<b>0.0393</b>		<b>130.0098</b>	<b>130.0098</b>	<b>3.2800e-003</b>	<b>3.0000e-003</b>	<b>130.9859</b>

**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	1.4725	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
<b>Total</b>	<b>1.4725</b>	<b>14.3184</b>	<b>13.4577</b>	<b>0.0241</b>		<b>0.6766</b>	<b>0.6766</b>		<b>0.6328</b>	<b>0.6328</b>	<b>0.0000</b>	<b>2,324.3959</b>	<b>2,324.3959</b>	<b>0.5893</b>		<b>2,339.1278</b>

8631 Hayden Place - 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**

**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	0.0416	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
<b>Total</b>	<b>0.0416</b>	<b>0.0290</b>	<b>0.4698</b>	<b>1.2900e-003</b>	<b>0.1453</b>	<b>8.7000e-004</b>	<b>0.1462</b>	<b>0.0385</b>	<b>8.0000e-004</b>	<b>0.0393</b>		<b>130.0098</b>	<b>130.0098</b>	<b>3.2800e-003</b>	<b>3.0000e-003</b>	<b>130.9859</b>

**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					1.5908	0.0000	1.5908	0.1718	0.0000	0.1718			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
<b>Total</b>	<b>1.3027</b>	<b>14.2802</b>	<b>9.7820</b>	<b>0.0245</b>	<b>1.5908</b>	<b>0.5419</b>	<b>2.1326</b>	<b>0.1718</b>	<b>0.4985</b>	<b>0.6703</b>		<b>2,374.8634</b>	<b>2,374.8634</b>	<b>0.7681</b>		<b>2,394.0654</b>

8631 Hayden Place - 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 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	0.0256	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
<b>Total</b>	<b>0.0256</b>	<b>0.0179</b>	<b>0.2891</b>	<b>7.9000e-004</b>	<b>0.0894</b>	<b>5.4000e-004</b>	<b>0.0900</b>	<b>0.0237</b>	<b>5.0000e-004</b>	<b>0.0242</b>		<b>80.0060</b>	<b>80.0060</b>	<b>2.0200e-003</b>	<b>1.8500e-003</b>	<b>80.6067</b>

**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					1.5908	0.0000	1.5908	0.1718	0.0000	0.1718			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
<b>Total</b>	<b>1.3027</b>	<b>14.2802</b>	<b>9.7820</b>	<b>0.0245</b>	<b>1.5908</b>	<b>0.5419</b>	<b>2.1326</b>	<b>0.1718</b>	<b>0.4985</b>	<b>0.6703</b>	<b>0.0000</b>	<b>2,374.8634</b>	<b>2,374.8634</b>	<b>0.7681</b>		<b>2,394.0654</b>

8631 Hayden Place - 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**

**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	0.0256	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
<b>Total</b>	<b>0.0256</b>	<b>0.0179</b>	<b>0.2891</b>	<b>7.9000e-004</b>	<b>0.0894</b>	<b>5.4000e-004</b>	<b>0.0900</b>	<b>0.0237</b>	<b>5.0000e-004</b>	<b>0.0242</b>		<b>80.0060</b>	<b>80.0060</b>	<b>2.0200e-003</b>	<b>1.8500e-003</b>	<b>80.6067</b>

**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					7.0826	0.0000	7.0826	3.4247	0.0000	3.4247			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
<b>Total</b>	<b>1.3330</b>	<b>14.4676</b>	<b>8.7038</b>	<b>0.0206</b>	<b>7.0826</b>	<b>0.6044</b>	<b>7.6869</b>	<b>3.4247</b>	<b>0.5560</b>	<b>3.9807</b>		<b>1,995.6147</b>	<b>1,995.6147</b>	<b>0.6454</b>		<b>2,011.7503</b>

8631 Hayden Place - 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 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	0.0320	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
<b>Total</b>	<b>0.0320</b>	<b>0.0223</b>	<b>0.3614</b>	<b>9.9000e-004</b>	<b>0.1118</b>	<b>6.7000e-004</b>	<b>0.1125</b>	<b>0.0296</b>	<b>6.2000e-004</b>	<b>0.0303</b>		<b>100.0075</b>	<b>100.0075</b>	<b>2.5200e-003</b>	<b>2.3100e-003</b>	<b>100.7583</b>

**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					7.0826	0.0000	7.0826	3.4247	0.0000	3.4247			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
<b>Total</b>	<b>1.3330</b>	<b>14.4676</b>	<b>8.7038</b>	<b>0.0206</b>	<b>7.0826</b>	<b>0.6044</b>	<b>7.6869</b>	<b>3.4247</b>	<b>0.5560</b>	<b>3.9807</b>	<b>0.0000</b>	<b>1,995.6147</b>	<b>1,995.6147</b>	<b>0.6454</b>		<b>2,011.7503</b>



8631 Hayden Place - 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**

**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	0.0320	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
<b>Total</b>	<b>0.0320</b>	<b>0.0223</b>	<b>0.3614</b>	<b>9.9000e-004</b>	<b>0.1118</b>	<b>6.7000e-004</b>	<b>0.1125</b>	<b>0.0296</b>	<b>6.2000e-004</b>	<b>0.0303</b>		<b>100.0075</b>	<b>100.0075</b>	<b>2.5200e-003</b>	<b>2.3100e-003</b>	<b>100.7583</b>

**3.5 Drainage/Utilities/Trenching - 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					7.0826	0.0000	7.0826	3.4247	0.0000	3.4247			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
<b>Total</b>	<b>1.3330</b>	<b>14.4676</b>	<b>8.7038</b>	<b>0.0206</b>	<b>7.0826</b>	<b>0.6044</b>	<b>7.6869</b>	<b>3.4247</b>	<b>0.5560</b>	<b>3.9807</b>		<b>1,995.6147</b>	<b>1,995.6147</b>	<b>0.6454</b>		<b>2,011.7503</b>

8631 Hayden Place - 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 Drainage/Utilities/Trenching - 2023**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0320	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
<b>Total</b>	<b>0.0320</b>	<b>0.0223</b>	<b>0.3614</b>	<b>9.9000e-004</b>	<b>0.1118</b>	<b>6.7000e-004</b>	<b>0.1125</b>	<b>0.0296</b>	<b>6.2000e-004</b>	<b>0.0303</b>		<b>100.0075</b>	<b>100.0075</b>	<b>2.5200e-003</b>	<b>2.3100e-003</b>	<b>100.7583</b>

**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					7.0826	0.0000	7.0826	3.4247	0.0000	3.4247			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
<b>Total</b>	<b>1.3330</b>	<b>14.4676</b>	<b>8.7038</b>	<b>0.0206</b>	<b>7.0826</b>	<b>0.6044</b>	<b>7.6869</b>	<b>3.4247</b>	<b>0.5560</b>	<b>3.9807</b>	<b>0.0000</b>	<b>1,995.6147</b>	<b>1,995.6147</b>	<b>0.6454</b>		<b>2,011.7503</b>

8631 Hayden Place - 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 Drainage/Utilities/Trenching - 2023**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0320	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
<b>Total</b>	<b>0.0320</b>	<b>0.0223</b>	<b>0.3614</b>	<b>9.9000e-004</b>	<b>0.1118</b>	<b>6.7000e-004</b>	<b>0.1125</b>	<b>0.0296</b>	<b>6.2000e-004</b>	<b>0.0303</b>		<b>100.0075</b>	<b>100.0075</b>	<b>2.5200e-003</b>	<b>2.3100e-003</b>	<b>100.7583</b>

**3.6 Foundation/Concrete Pour - 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					7.0826	0.0000	7.0826	3.4247	0.0000	3.4247			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
<b>Total</b>	<b>1.3330</b>	<b>14.4676</b>	<b>8.7038</b>	<b>0.0206</b>	<b>7.0826</b>	<b>0.6044</b>	<b>7.6869</b>	<b>3.4247</b>	<b>0.5560</b>	<b>3.9807</b>		<b>1,995.6147</b>	<b>1,995.6147</b>	<b>0.6454</b>		<b>2,011.7503</b>

8631 Hayden Place - 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 Foundation/Concrete Pour - 2023**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0320	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
<b>Total</b>	<b>0.0320</b>	<b>0.0223</b>	<b>0.3614</b>	<b>9.9000e-004</b>	<b>0.1118</b>	<b>6.7000e-004</b>	<b>0.1125</b>	<b>0.0296</b>	<b>6.2000e-004</b>	<b>0.0303</b>		<b>100.0075</b>	<b>100.0075</b>	<b>2.5200e-003</b>	<b>2.3100e-003</b>	<b>100.7583</b>

**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					7.0826	0.0000	7.0826	3.4247	0.0000	3.4247			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
<b>Total</b>	<b>1.3330</b>	<b>14.4676</b>	<b>8.7038</b>	<b>0.0206</b>	<b>7.0826</b>	<b>0.6044</b>	<b>7.6869</b>	<b>3.4247</b>	<b>0.5560</b>	<b>3.9807</b>	<b>0.0000</b>	<b>1,995.6147</b>	<b>1,995.6147</b>	<b>0.6454</b>		<b>2,011.7503</b>

8631 Hayden Place - 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 Foundation/Concrete Pour - 2023**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0320	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
<b>Total</b>	<b>0.0320</b>	<b>0.0223</b>	<b>0.3614</b>	<b>9.9000e-004</b>	<b>0.1118</b>	<b>6.7000e-004</b>	<b>0.1125</b>	<b>0.0296</b>	<b>6.2000e-004</b>	<b>0.0303</b>		<b>100.0075</b>	<b>100.0075</b>	<b>2.5200e-003</b>	<b>2.3100e-003</b>	<b>100.7583</b>

**3.7 Exterior 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
<b>Total</b>	<b>1.7136</b>	<b>13.6239</b>	<b>14.2145</b>	<b>0.0250</b>		<b>0.6136</b>	<b>0.6136</b>		<b>0.5880</b>	<b>0.5880</b>		<b>2,289.5233</b>	<b>2,289.5233</b>	<b>0.4330</b>		<b>2,300.3479</b>

8631 Hayden Place - 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 Exterior Construction - 2023**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0184	0.6141	0.2379	2.9800e-003	0.1025	3.0900e-003	0.1056	0.0295	2.9500e-003	0.0325		320.4520	320.4520	0.0107	0.0461	334.4498
Worker	0.1312	0.0915	1.4817	4.0600e-003	0.4583	2.7600e-003	0.4610	0.1215	2.5400e-003	0.1241		410.0309	410.0309	0.0103	9.4600e-003	413.1092
<b>Total</b>	<b>0.1496</b>	<b>0.7056</b>	<b>1.7197</b>	<b>7.0400e-003</b>	<b>0.5608</b>	<b>5.8500e-003</b>	<b>0.5666</b>	<b>0.1511</b>	<b>5.4900e-003</b>	<b>0.1565</b>		<b>730.4829</b>	<b>730.4829</b>	<b>0.0211</b>	<b>0.0555</b>	<b>747.5590</b>

**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
<b>Total</b>	<b>1.7136</b>	<b>13.6239</b>	<b>14.2145</b>	<b>0.0250</b>		<b>0.6136</b>	<b>0.6136</b>		<b>0.5880</b>	<b>0.5880</b>	<b>0.0000</b>	<b>2,289.5233</b>	<b>2,289.5233</b>	<b>0.4330</b>		<b>2,300.3479</b>

8631 Hayden Place - 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 Exterior Construction - 2023**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0184	0.6141	0.2379	2.9800e-003	0.1025	3.0900e-003	0.1056	0.0295	2.9500e-003	0.0325		320.4520	320.4520	0.0107	0.0461	334.4498
Worker	0.1312	0.0915	1.4817	4.0600e-003	0.4583	2.7600e-003	0.4610	0.1215	2.5400e-003	0.1241		410.0309	410.0309	0.0103	9.4600e-003	413.1092
<b>Total</b>	<b>0.1496</b>	<b>0.7056</b>	<b>1.7197</b>	<b>7.0400e-003</b>	<b>0.5608</b>	<b>5.8500e-003</b>	<b>0.5666</b>	<b>0.1511</b>	<b>5.4900e-003</b>	<b>0.1565</b>		<b>730.4829</b>	<b>730.4829</b>	<b>0.0211</b>	<b>0.0555</b>	<b>747.5590</b>

**3.7 Exterior 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
<b>Total</b>	<b>1.5971</b>	<b>12.8235</b>	<b>14.1002</b>	<b>0.0250</b>		<b>0.5381</b>	<b>0.5381</b>		<b>0.5153</b>	<b>0.5153</b>		<b>2,289.6541</b>	<b>2,289.6541</b>	<b>0.4265</b>		<b>2,300.3154</b>

8631 Hayden Place - 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 Exterior Construction - 2024**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0179	0.6154	0.2329	2.9300e-003	0.1025	3.1100e-003	0.1056	0.0295	2.9700e-003	0.0325		315.6394	315.6394	0.0108	0.0454	329.4464
Worker	0.1222	0.0816	1.3769	3.9400e-003	0.4583	2.6400e-003	0.4609	0.1215	2.4300e-003	0.1240		398.4093	398.4093	9.3500e-003	8.8000e-003	401.2656
<b>Total</b>	<b>0.1401</b>	<b>0.6970</b>	<b>1.6097</b>	<b>6.8700e-003</b>	<b>0.5608</b>	<b>5.7500e-003</b>	<b>0.5665</b>	<b>0.1511</b>	<b>5.4000e-003</b>	<b>0.1565</b>		<b>714.0487</b>	<b>714.0487</b>	<b>0.0201</b>	<b>0.0542</b>	<b>730.7120</b>

**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
<b>Total</b>	<b>1.5971</b>	<b>12.8235</b>	<b>14.1002</b>	<b>0.0250</b>		<b>0.5381</b>	<b>0.5381</b>		<b>0.5153</b>	<b>0.5153</b>	<b>0.0000</b>	<b>2,289.6541</b>	<b>2,289.6541</b>	<b>0.4265</b>		<b>2,300.3154</b>



8631 Hayden Place - 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 Exterior Construction - 2024**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0179	0.6154	0.2329	2.9300e-003	0.1025	3.1100e-003	0.1056	0.0295	2.9700e-003	0.0325		315.6394	315.6394	0.0108	0.0454	329.4464
Worker	0.1222	0.0816	1.3769	3.9400e-003	0.4583	2.6400e-003	0.4609	0.1215	2.4300e-003	0.1240		398.4093	398.4093	9.3500e-003	8.8000e-003	401.2656
<b>Total</b>	<b>0.1401</b>	<b>0.6970</b>	<b>1.6097</b>	<b>6.8700e-003</b>	<b>0.5608</b>	<b>5.7500e-003</b>	<b>0.5665</b>	<b>0.1511</b>	<b>5.4000e-003</b>	<b>0.1565</b>		<b>714.0487</b>	<b>714.0487</b>	<b>0.0201</b>	<b>0.0542</b>	<b>730.7120</b>

**3.8 Interior 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					
Archit. Coating	2.1083					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
<b>Total</b>	<b>2.2999</b>	<b>1.3030</b>	<b>1.8111</b>	<b>2.9700e-003</b>		<b>0.0708</b>	<b>0.0708</b>		<b>0.0708</b>	<b>0.0708</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0168</b>		<b>281.8690</b>

8631 Hayden Place - 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**

**3.8 Interior Construction - 2023**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0256	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
<b>Total</b>	<b>0.0256</b>	<b>0.0179</b>	<b>0.2891</b>	<b>7.9000e-004</b>	<b>0.0894</b>	<b>5.4000e-004</b>	<b>0.0900</b>	<b>0.0237</b>	<b>5.0000e-004</b>	<b>0.0242</b>		<b>80.0060</b>	<b>80.0060</b>	<b>2.0200e-003</b>	<b>1.8500e-003</b>	<b>80.6067</b>

**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	2.1083					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
<b>Total</b>	<b>2.2999</b>	<b>1.3030</b>	<b>1.8111</b>	<b>2.9700e-003</b>		<b>0.0708</b>	<b>0.0708</b>		<b>0.0708</b>	<b>0.0708</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0168</b>		<b>281.8690</b>

8631 Hayden Place - 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**

**3.8 Interior Construction - 2023**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0256	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
<b>Total</b>	<b>0.0256</b>	<b>0.0179</b>	<b>0.2891</b>	<b>7.9000e-004</b>	<b>0.0894</b>	<b>5.4000e-004</b>	<b>0.0900</b>	<b>0.0237</b>	<b>5.0000e-004</b>	<b>0.0242</b>		<b>80.0060</b>	<b>80.0060</b>	<b>2.0200e-003</b>	<b>1.8500e-003</b>	<b>80.6067</b>

**3.8 Interior 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					
Archit. Coating	2.1083					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
<b>Total</b>	<b>2.2890</b>	<b>1.2188</b>	<b>1.8101</b>	<b>2.9700e-003</b>		<b>0.0609</b>	<b>0.0609</b>		<b>0.0609</b>	<b>0.0609</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0159</b>		<b>281.8443</b>

8631 Hayden Place - 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**

**3.8 Interior Construction - 2024**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0239	0.0159	0.2687	7.7000e-004	0.0894	5.1000e-004	0.0899	0.0237	4.7000e-004	0.0242		77.7384	77.7384	1.8300e-003	1.7200e-003	78.2957
<b>Total</b>	<b>0.0239</b>	<b>0.0159</b>	<b>0.2687</b>	<b>7.7000e-004</b>	<b>0.0894</b>	<b>5.1000e-004</b>	<b>0.0899</b>	<b>0.0237</b>	<b>4.7000e-004</b>	<b>0.0242</b>		<b>77.7384</b>	<b>77.7384</b>	<b>1.8300e-003</b>	<b>1.7200e-003</b>	<b>78.2957</b>

**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	2.1083					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
<b>Total</b>	<b>2.2890</b>	<b>1.2188</b>	<b>1.8101</b>	<b>2.9700e-003</b>		<b>0.0609</b>	<b>0.0609</b>		<b>0.0609</b>	<b>0.0609</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0159</b>		<b>281.8443</b>

8631 Hayden Place - 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**

**3.8 Interior Construction - 2024**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0239	0.0159	0.2687	7.7000e-004	0.0894	5.1000e-004	0.0899	0.0237	4.7000e-004	0.0242		77.7384	77.7384	1.8300e-003	1.7200e-003	78.2957
<b>Total</b>	<b>0.0239</b>	<b>0.0159</b>	<b>0.2687</b>	<b>7.7000e-004</b>	<b>0.0894</b>	<b>5.1000e-004</b>	<b>0.0899</b>	<b>0.0237</b>	<b>4.7000e-004</b>	<b>0.0242</b>		<b>77.7384</b>	<b>77.7384</b>	<b>1.8300e-003</b>	<b>1.7200e-003</b>	<b>78.2957</b>

**3.9 Paving - 2024**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8425	8.1030	11.7069	0.0179		0.3957	0.3957		0.3652	0.3652		1,710.2024	1,710.2024	0.5420		1,723.7529
Paving	0.0585					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.9009</b>	<b>8.1030</b>	<b>11.7069</b>	<b>0.0179</b>		<b>0.3957</b>	<b>0.3957</b>		<b>0.3652</b>	<b>0.3652</b>		<b>1,710.2024</b>	<b>1,710.2024</b>	<b>0.5420</b>		<b>1,723.7529</b>

8631 Hayden Place - 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**

**3.9 Paving - 2024**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0447	0.0299	0.5037	1.4400e-003	0.1677	9.7000e-004	0.1686	0.0445	8.9000e-004	0.0454		145.7595	145.7595	3.4200e-003	3.2200e-003	146.8045
<b>Total</b>	<b>0.0447</b>	<b>0.0299</b>	<b>0.5037</b>	<b>1.4400e-003</b>	<b>0.1677</b>	<b>9.7000e-004</b>	<b>0.1686</b>	<b>0.0445</b>	<b>8.9000e-004</b>	<b>0.0454</b>		<b>145.7595</b>	<b>145.7595</b>	<b>3.4200e-003</b>	<b>3.2200e-003</b>	<b>146.8045</b>

**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	0.8425	8.1030	11.7069	0.0179		0.3957	0.3957		0.3652	0.3652	0.0000	1,710.2024	1,710.2024	0.5420		1,723.7529
Paving	0.0585					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.9009</b>	<b>8.1030</b>	<b>11.7069</b>	<b>0.0179</b>		<b>0.3957</b>	<b>0.3957</b>		<b>0.3652</b>	<b>0.3652</b>	<b>0.0000</b>	<b>1,710.2024</b>	<b>1,710.2024</b>	<b>0.5420</b>		<b>1,723.7529</b>

8631 Hayden Place - 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**

**3.9 Paving - 2024**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0447	0.0299	0.5037	1.4400e-003	0.1677	9.7000e-004	0.1686	0.0445	8.9000e-004	0.0454		145.7595	145.7595	3.4200e-003	3.2200e-003	146.8045
<b>Total</b>	<b>0.0447</b>	<b>0.0299</b>	<b>0.5037</b>	<b>1.4400e-003</b>	<b>0.1677</b>	<b>9.7000e-004</b>	<b>0.1686</b>	<b>0.0445</b>	<b>8.9000e-004</b>	<b>0.0454</b>		<b>145.7595</b>	<b>145.7595</b>	<b>3.4200e-003</b>	<b>3.2200e-003</b>	<b>146.8045</b>

**4.0 Operational Detail - Mobile**

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**4.1 Mitigation Measures Mobile**

8631 Hayden Place - 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	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.3038	1.5805	14.5815	0.0320	3.1612	0.0262	3.1874	0.8420	0.0244	0.8664		3,261.8526	3,261.8526	0.2038	0.1295	3,305.5290
Unmitigated	1.3038	1.5805	14.5815	0.0320	3.1612	0.0262	3.1874	0.8420	0.0244	0.8664		3,261.8526	3,261.8526	0.2038	0.1295	3,305.5290

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	230.54	92.50	232.40	934,746	934,746
General Light Industry	49.60	19.90	50.00	201,107	201,107
General Office Building	77.92	17.68	5.60	190,011	190,011
Parking Lot	0.00	0.00	0.00		
<b>Total</b>	<b>358.06</b>	<b>130.08</b>	<b>288.00</b>	<b>1,325,864</b>	<b>1,325,864</b>

**4.3 Trip Type Information**

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3
General Light Industry	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

**4.4 Fleet Mix**



8631 Hayden Place - 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**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.546774	0.061880	0.186704	0.127505	0.022909	0.005912	0.010702	0.008032	0.000940	0.000617	0.023937	0.000692	0.003397
General Office Building	0.546774	0.061880	0.186704	0.127505	0.022909	0.005912	0.010702	0.008032	0.000940	0.000617	0.023937	0.000692	0.003397
Parking Lot	0.546774	0.061880	0.186704	0.127505	0.022909	0.005912	0.010702	0.008032	0.000940	0.000617	0.023937	0.000692	0.003397

**5.0 Energy Detail**

Historical Energy Use: Y

**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	0.0360	0.3271	0.2748	1.9600e-003		0.0249	0.0249		0.0249	0.0249		392.5299	392.5299	7.5200e-003	7.2000e-003	394.8625
NaturalGas Unmitigated	0.0360	0.3271	0.2748	1.9600e-003		0.0249	0.0249		0.0249	0.0249		392.5299	392.5299	7.5200e-003	7.2000e-003	394.8625

8631 Hayden Place - 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**

**5.2 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					
General Light Industry	2521.38	0.0272	0.2472	0.2076	1.4800e-003		0.0188	0.0188		0.0188	0.0188		296.6330	296.6330	5.6900e-003	5.4400e-003	298.3958
General Light Industry	542.466	5.8500e-003	0.0532	0.0447	3.2000e-004		4.0400e-003	4.0400e-003		4.0400e-003	4.0400e-003		63.8195	63.8195	1.2200e-003	1.1700e-003	64.1988
General Office Building	272.658	2.9400e-003	0.0267	0.0225	1.6000e-004		2.0300e-003	2.0300e-003		2.0300e-003	2.0300e-003		32.0774	32.0774	6.1000e-004	5.9000e-004	32.2680
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0360</b>	<b>0.3271</b>	<b>0.2748</b>	<b>1.9600e-003</b>		<b>0.0249</b>	<b>0.0249</b>		<b>0.0249</b>	<b>0.0249</b>		<b>392.5299</b>	<b>392.5299</b>	<b>7.5200e-003</b>	<b>7.2000e-003</b>	<b>394.8625</b>

8631 Hayden Place - 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**

**5.2 Energy by Land Use - NaturalGas**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	2.52138	0.0272	0.2472	0.2076	1.4800e-003		0.0188	0.0188		0.0188	0.0188		296.6330	296.6330	5.6900e-003	5.4400e-003	298.3958
General Light Industry	0.542466	5.8500e-003	0.0532	0.0447	3.2000e-004		4.0400e-003	4.0400e-003		4.0400e-003	4.0400e-003		63.8195	63.8195	1.2200e-003	1.1700e-003	64.1988
General Office Building	0.272658	2.9400e-003	0.0267	0.0225	1.6000e-004		2.0300e-003	2.0300e-003		2.0300e-003	2.0300e-003		32.0774	32.0774	6.1000e-004	5.9000e-004	32.2680
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0360</b>	<b>0.3271</b>	<b>0.2748</b>	<b>1.9600e-003</b>		<b>0.0249</b>	<b>0.0249</b>		<b>0.0249</b>	<b>0.0249</b>		<b>392.5299</b>	<b>392.5299</b>	<b>7.5200e-003</b>	<b>7.2000e-003</b>	<b>394.8625</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

8631 Hayden Place - 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	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.4565	1.4000e-004	0.0153	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0327	0.0327	9.0000e-005		0.0349
Unmitigated	1.4565	1.4000e-004	0.0153	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0327	0.0327	9.0000e-005		0.0349

**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	0.1664					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.2888					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.4200e-003	1.4000e-004	0.0153	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0327	0.0327	9.0000e-005		0.0349
<b>Total</b>	<b>1.4565</b>	<b>1.4000e-004</b>	<b>0.0153</b>	<b>0.0000</b>		<b>5.0000e-005</b>	<b>5.0000e-005</b>		<b>5.0000e-005</b>	<b>5.0000e-005</b>		<b>0.0327</b>	<b>0.0327</b>	<b>9.0000e-005</b>		<b>0.0349</b>

8631 Hayden Place - 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**

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	0.1664					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.2888					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.4200e-003	1.4000e-004	0.0153	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0327	0.0327	9.0000e-005		0.0349
<b>Total</b>	<b>1.4565</b>	<b>1.4000e-004</b>	<b>0.0153</b>	<b>0.0000</b>		<b>5.0000e-005</b>	<b>5.0000e-005</b>		<b>5.0000e-005</b>	<b>5.0000e-005</b>		<b>0.0327</b>	<b>0.0327</b>	<b>9.0000e-005</b>		<b>0.0349</b>

**7.0 Water Detail**

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**7.1 Mitigation Measures Water**

8631 Hayden Place - 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**

**8.0 Waste Detail**

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**8.1 Mitigation Measures Waste**

**9.0 Operational Offroad**

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

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**Fire Pumps and Emergency Generators**

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

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

Equipment Type	Number
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**11.0 Vegetation**

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8631 Hayden Place - 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**

**8631 Hayden Place**  
**Los Angeles-South Coast County, Winter**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	8.00	1000sqft	0.60	8,000.00	0
General Light Industry	46.48	1000sqft	1.00	46,480.00	0
General Light Industry	10.00	1000sqft	0.50	10,000.00	0
Parking Lot	85.00	Space	0.58	34,000.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	33
<b>Climate Zone</b>	11			<b>Operational Year</b>	2022
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MWhr)</b>	390.98	<b>CH4 Intensity (lb/MWhr)</b>	0.033	<b>N2O Intensity (lb/MWhr)</b>	0.004

**1.3 User Entered Comments & Non-Default Data**

- Project Characteristics -
- Land Use - See Construction Assumptions
- Construction Phase - See Construction Assumptions
- Grading -
- Energy Use -
- Vehicle Emission Factors -
- Vehicle Emission Factors -
- Vehicle Emission Factors -
- Fleet Mix -

8631 Hayden Place - 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**

Table Name	Column Name	Default Value	New Value
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	12.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstructionPhase	NumDays	10.00	288.00
tblConstructionPhase	NumDays	220.00	236.00
tblConstructionPhase	NumDays	20.00	26.00
tblConstructionPhase	NumDays	6.00	54.00
tblConstructionPhase	NumDays	6.00	80.00
tblConstructionPhase	NumDays	6.00	28.00
tblConstructionPhase	NumDays	10.00	26.00
tblConstructionPhase	NumDays	3.00	27.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00



8631 Hayden Place - 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	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblLandUse	LotAcreage	0.18	0.60
tblLandUse	LotAcreage	0.23	0.50
tblLandUse	LotAcreage	1.07	1.00
tblLandUse	LotAcreage	0.76	0.58

**2.0 Emissions Summary**

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8631 Hayden Place - 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**

**2.1 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	5.5821	57.6349	42.0092	0.0937	16.2142	2.4300	18.6442	7.1428	2.2458	9.3886	0.0000	9,078.9037	9,078.9037	2.6587	0.0588	9,148.3827
2024	4.0608	14.7943	17.6644	0.0354	0.6502	0.6053	1.2555	0.1748	0.5821	0.7568	0.0000	3,338.3740	3,338.3740	0.5455	0.0568	3,366.9030
<b>Maximum</b>	<b>5.5821</b>	<b>57.6349</b>	<b>42.0092</b>	<b>0.0937</b>	<b>16.2142</b>	<b>2.4300</b>	<b>18.6442</b>	<b>7.1428</b>	<b>2.2458</b>	<b>9.3886</b>	<b>0.0000</b>	<b>9,078.9037</b>	<b>9,078.9037</b>	<b>2.6587</b>	<b>0.0588</b>	<b>9,148.3827</b>

**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	5.5821	57.6349	42.0092	0.0937	16.2142	2.4300	18.6442	7.1428	2.2458	9.3886	0.0000	9,078.9037	9,078.9037	2.6587	0.0588	9,148.3827
2024	4.0608	14.7943	17.6644	0.0354	0.6502	0.6053	1.2555	0.1748	0.5821	0.7568	0.0000	3,338.3740	3,338.3740	0.5455	0.0568	3,366.9030
<b>Maximum</b>	<b>5.5821</b>	<b>57.6349</b>	<b>42.0092</b>	<b>0.0937</b>	<b>16.2142</b>	<b>2.4300</b>	<b>18.6442</b>	<b>7.1428</b>	<b>2.2458</b>	<b>9.3886</b>	<b>0.0000</b>	<b>9,078.9037</b>	<b>9,078.9037</b>	<b>2.6587</b>	<b>0.0588</b>	<b>9,148.3827</b>



8631 Hayden Place - 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**

**2.2 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	1.4565	1.4000e-004	0.0153	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0327	0.0327	9.0000e-005		0.0349
Energy	0.0360	0.3271	0.2748	1.9600e-003		0.0249	0.0249		0.0249	0.0249		392.5299	392.5299	7.5200e-003	7.2000e-003	394.8625
Mobile	1.2846	1.7030	14.0979	0.0306	3.1612	0.0262	3.1874	0.8420	0.0244	0.8664		3,121.2064	3,121.2064	0.2085	0.1353	3,166.7300
<b>Total</b>	<b>2.7771</b>	<b>2.0302</b>	<b>14.3880</b>	<b>0.0326</b>	<b>3.1612</b>	<b>0.0511</b>	<b>3.2123</b>	<b>0.8420</b>	<b>0.0493</b>	<b>0.8913</b>		<b>3,513.7690</b>	<b>3,513.7690</b>	<b>0.2161</b>	<b>0.1425</b>	<b>3,561.6274</b>

**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	1.4565	1.4000e-004	0.0153	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0327	0.0327	9.0000e-005		0.0349
Energy	0.0360	0.3271	0.2748	1.9600e-003		0.0249	0.0249		0.0249	0.0249		392.5299	392.5299	7.5200e-003	7.2000e-003	394.8625
Mobile	1.2846	1.7030	14.0979	0.0306	3.1612	0.0262	3.1874	0.8420	0.0244	0.8664		3,121.2064	3,121.2064	0.2085	0.1353	3,166.7300
<b>Total</b>	<b>2.7771</b>	<b>2.0302</b>	<b>14.3880</b>	<b>0.0326</b>	<b>3.1612</b>	<b>0.0511</b>	<b>3.2123</b>	<b>0.8420</b>	<b>0.0493</b>	<b>0.8913</b>		<b>3,513.7690</b>	<b>3,513.7690</b>	<b>0.2161</b>	<b>0.1425</b>	<b>3,561.6274</b>

8631 Hayden Place - Los Angeles-South Coast County, Winter

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
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	4/1/2023	5/1/2023	6	26	
2	Site Preparation	Site Preparation	5/1/2023	5/31/2023	6	27	
3	Grading	Grading	5/1/2023	7/1/2023	6	54	
4	Drainage/Utilities/Trenching	Grading	5/1/2023	8/1/2023	6	80	
5	Foundation/Concrete Pour	Grading	8/1/2023	9/1/2023	6	28	
6	Exterior Construction	Building Construction	9/1/2023	6/1/2024	6	236	
7	Interior Construction	Architectural Coating	10/1/2023	8/31/2024	6	288	
8	Paving	Paving	9/1/2024	10/1/2024	6	26	

**Acres of Grading (Site Preparation Phase): 40.5**

**Acres of Grading (Grading Phase): 54**

**Acres of Paving: 0.58**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 96,720; Non-Residential Outdoor: 32,240; Striped Parking Area: 2,040 (Architectural Coating – sqft)**

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37

8631 Hayden Place - 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**

Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Scrapers	1	8.00	367	0.48
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Drainage/Utilities/Trenching	Graders	1	8.00	187	0.41
Drainage/Utilities/Trenching	Rubber Tired Dozers	1	8.00	247	0.40
Drainage/Utilities/Trenching	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Foundation/Concrete Pour	Graders	1	8.00	187	0.41
Foundation/Concrete Pour	Rubber Tired Dozers	1	8.00	247	0.40
Foundation/Concrete Pour	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Exterior Construction	Cranes	1	8.00	231	0.29
Exterior Construction	Forklifts	2	7.00	89	0.20
Exterior Construction	Generator Sets	1	8.00	84	0.74
Exterior Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Exterior Construction	Welders	3	8.00	46	0.45
Interior Construction	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
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
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

8631 Hayden Place - 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**

Site Preparation	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Drainage/Utilities/Trenching	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Foundation/Concrete Pour	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Exterior Construction	8	41.00	16.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Interior Construction	1	8.00	0.00	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

**3.1 Mitigation Measures Construction**

**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					
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
<b>Total</b>	<b>1.4725</b>	<b>14.3184</b>	<b>13.4577</b>	<b>0.0241</b>		<b>0.6766</b>	<b>0.6766</b>		<b>0.6328</b>	<b>0.6328</b>		<b>2,324.3959</b>	<b>2,324.3959</b>	<b>0.5893</b>		<b>2,339.1278</b>

8631 Hayden Place - 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 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	0.0447	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
<b>Total</b>	<b>0.0447</b>	<b>0.0320</b>	<b>0.4318</b>	<b>1.2200e-003</b>	<b>0.1453</b>	<b>8.7000e-004</b>	<b>0.1462</b>	<b>0.0385</b>	<b>8.0000e-004</b>	<b>0.0393</b>		<b>123.1560</b>	<b>123.1560</b>	<b>3.3200e-003</b>	<b>3.2000e-003</b>	<b>124.1941</b>

**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	1.4725	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
<b>Total</b>	<b>1.4725</b>	<b>14.3184</b>	<b>13.4577</b>	<b>0.0241</b>		<b>0.6766</b>	<b>0.6766</b>		<b>0.6328</b>	<b>0.6328</b>	<b>0.0000</b>	<b>2,324.3959</b>	<b>2,324.3959</b>	<b>0.5893</b>		<b>2,339.1278</b>



8631 Hayden Place - 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**

**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	0.0447	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
<b>Total</b>	<b>0.0447</b>	<b>0.0320</b>	<b>0.4318</b>	<b>1.2200e-003</b>	<b>0.1453</b>	<b>8.7000e-004</b>	<b>0.1462</b>	<b>0.0385</b>	<b>8.0000e-004</b>	<b>0.0393</b>		<b>123.1560</b>	<b>123.1560</b>	<b>3.3200e-003</b>	<b>3.2000e-003</b>	<b>124.1941</b>

**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					1.5908	0.0000	1.5908	0.1718	0.0000	0.1718			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
<b>Total</b>	<b>1.3027</b>	<b>14.2802</b>	<b>9.7820</b>	<b>0.0245</b>	<b>1.5908</b>	<b>0.5419</b>	<b>2.1326</b>	<b>0.1718</b>	<b>0.4985</b>	<b>0.6703</b>		<b>2,374.8634</b>	<b>2,374.8634</b>	<b>0.7681</b>		<b>2,394.0654</b>

8631 Hayden Place - 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 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	0.0275	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
<b>Total</b>	<b>0.0275</b>	<b>0.0197</b>	<b>0.2658</b>	<b>7.5000e-004</b>	<b>0.0894</b>	<b>5.4000e-004</b>	<b>0.0900</b>	<b>0.0237</b>	<b>5.0000e-004</b>	<b>0.0242</b>		<b>75.7883</b>	<b>75.7883</b>	<b>2.0500e-003</b>	<b>1.9700e-003</b>	<b>76.4271</b>

**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					1.5908	0.0000	1.5908	0.1718	0.0000	0.1718			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
<b>Total</b>	<b>1.3027</b>	<b>14.2802</b>	<b>9.7820</b>	<b>0.0245</b>	<b>1.5908</b>	<b>0.5419</b>	<b>2.1326</b>	<b>0.1718</b>	<b>0.4985</b>	<b>0.6703</b>	<b>0.0000</b>	<b>2,374.8634</b>	<b>2,374.8634</b>	<b>0.7681</b>		<b>2,394.0654</b>

8631 Hayden Place - 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**

**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	0.0275	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
<b>Total</b>	<b>0.0275</b>	<b>0.0197</b>	<b>0.2658</b>	<b>7.5000e-004</b>	<b>0.0894</b>	<b>5.4000e-004</b>	<b>0.0900</b>	<b>0.0237</b>	<b>5.0000e-004</b>	<b>0.0242</b>		<b>75.7883</b>	<b>75.7883</b>	<b>2.0500e-003</b>	<b>1.9700e-003</b>	<b>76.4271</b>

**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					7.0826	0.0000	7.0826	3.4247	0.0000	3.4247			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
<b>Total</b>	<b>1.3330</b>	<b>14.4676</b>	<b>8.7038</b>	<b>0.0206</b>	<b>7.0826</b>	<b>0.6044</b>	<b>7.6869</b>	<b>3.4247</b>	<b>0.5560</b>	<b>3.9807</b>		<b>1,995.6147</b>	<b>1,995.6147</b>	<b>0.6454</b>		<b>2,011.7503</b>

8631 Hayden Place - 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 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	0.0344	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
<b>Total</b>	<b>0.0344</b>	<b>0.0246</b>	<b>0.3322</b>	<b>9.4000e-004</b>	<b>0.1118</b>	<b>6.7000e-004</b>	<b>0.1125</b>	<b>0.0296</b>	<b>6.2000e-004</b>	<b>0.0303</b>		<b>94.7354</b>	<b>94.7354</b>	<b>2.5600e-003</b>	<b>2.4700e-003</b>	<b>95.5339</b>

**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					7.0826	0.0000	7.0826	3.4247	0.0000	3.4247			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
<b>Total</b>	<b>1.3330</b>	<b>14.4676</b>	<b>8.7038</b>	<b>0.0206</b>	<b>7.0826</b>	<b>0.6044</b>	<b>7.6869</b>	<b>3.4247</b>	<b>0.5560</b>	<b>3.9807</b>	<b>0.0000</b>	<b>1,995.6147</b>	<b>1,995.6147</b>	<b>0.6454</b>		<b>2,011.7503</b>

8631 Hayden Place - 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**

**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	0.0344	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
<b>Total</b>	<b>0.0344</b>	<b>0.0246</b>	<b>0.3322</b>	<b>9.4000e-004</b>	<b>0.1118</b>	<b>6.7000e-004</b>	<b>0.1125</b>	<b>0.0296</b>	<b>6.2000e-004</b>	<b>0.0303</b>		<b>94.7354</b>	<b>94.7354</b>	<b>2.5600e-003</b>	<b>2.4700e-003</b>	<b>95.5339</b>

**3.5 Drainage/Utilities/Trenching - 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					7.0826	0.0000	7.0826	3.4247	0.0000	3.4247			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
<b>Total</b>	<b>1.3330</b>	<b>14.4676</b>	<b>8.7038</b>	<b>0.0206</b>	<b>7.0826</b>	<b>0.6044</b>	<b>7.6869</b>	<b>3.4247</b>	<b>0.5560</b>	<b>3.9807</b>		<b>1,995.6147</b>	<b>1,995.6147</b>	<b>0.6454</b>		<b>2,011.7503</b>

8631 Hayden Place - 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 Drainage/Utilities/Trenching - 2023**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0344	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
<b>Total</b>	<b>0.0344</b>	<b>0.0246</b>	<b>0.3322</b>	<b>9.4000e-004</b>	<b>0.1118</b>	<b>6.7000e-004</b>	<b>0.1125</b>	<b>0.0296</b>	<b>6.2000e-004</b>	<b>0.0303</b>		<b>94.7354</b>	<b>94.7354</b>	<b>2.5600e-003</b>	<b>2.4700e-003</b>	<b>95.5339</b>

**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					7.0826	0.0000	7.0826	3.4247	0.0000	3.4247			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
<b>Total</b>	<b>1.3330</b>	<b>14.4676</b>	<b>8.7038</b>	<b>0.0206</b>	<b>7.0826</b>	<b>0.6044</b>	<b>7.6869</b>	<b>3.4247</b>	<b>0.5560</b>	<b>3.9807</b>	<b>0.0000</b>	<b>1,995.6147</b>	<b>1,995.6147</b>	<b>0.6454</b>		<b>2,011.7503</b>

8631 Hayden Place - 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 Drainage/Utilities/Trenching - 2023**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0344	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
<b>Total</b>	<b>0.0344</b>	<b>0.0246</b>	<b>0.3322</b>	<b>9.4000e-004</b>	<b>0.1118</b>	<b>6.7000e-004</b>	<b>0.1125</b>	<b>0.0296</b>	<b>6.2000e-004</b>	<b>0.0303</b>		<b>94.7354</b>	<b>94.7354</b>	<b>2.5600e-003</b>	<b>2.4700e-003</b>	<b>95.5339</b>

**3.6 Foundation/Concrete Pour - 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					7.0826	0.0000	7.0826	3.4247	0.0000	3.4247			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
<b>Total</b>	<b>1.3330</b>	<b>14.4676</b>	<b>8.7038</b>	<b>0.0206</b>	<b>7.0826</b>	<b>0.6044</b>	<b>7.6869</b>	<b>3.4247</b>	<b>0.5560</b>	<b>3.9807</b>		<b>1,995.6147</b>	<b>1,995.6147</b>	<b>0.6454</b>		<b>2,011.7503</b>

8631 Hayden Place - 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 Foundation/Concrete Pour - 2023**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0344	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
<b>Total</b>	<b>0.0344</b>	<b>0.0246</b>	<b>0.3322</b>	<b>9.4000e-004</b>	<b>0.1118</b>	<b>6.7000e-004</b>	<b>0.1125</b>	<b>0.0296</b>	<b>6.2000e-004</b>	<b>0.0303</b>		<b>94.7354</b>	<b>94.7354</b>	<b>2.5600e-003</b>	<b>2.4700e-003</b>	<b>95.5339</b>

**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					7.0826	0.0000	7.0826	3.4247	0.0000	3.4247			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
<b>Total</b>	<b>1.3330</b>	<b>14.4676</b>	<b>8.7038</b>	<b>0.0206</b>	<b>7.0826</b>	<b>0.6044</b>	<b>7.6869</b>	<b>3.4247</b>	<b>0.5560</b>	<b>3.9807</b>	<b>0.0000</b>	<b>1,995.6147</b>	<b>1,995.6147</b>	<b>0.6454</b>		<b>2,011.7503</b>



8631 Hayden Place - 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 Foundation/Concrete Pour - 2023**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0344	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
<b>Total</b>	<b>0.0344</b>	<b>0.0246</b>	<b>0.3322</b>	<b>9.4000e-004</b>	<b>0.1118</b>	<b>6.7000e-004</b>	<b>0.1125</b>	<b>0.0296</b>	<b>6.2000e-004</b>	<b>0.0303</b>		<b>94.7354</b>	<b>94.7354</b>	<b>2.5600e-003</b>	<b>2.4700e-003</b>	<b>95.5339</b>

**3.7 Exterior 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
<b>Total</b>	<b>1.7136</b>	<b>13.6239</b>	<b>14.2145</b>	<b>0.0250</b>		<b>0.6136</b>	<b>0.6136</b>		<b>0.5880</b>	<b>0.5880</b>		<b>2,289.5233</b>	<b>2,289.5233</b>	<b>0.4330</b>		<b>2,300.3479</b>

8631 Hayden Place - 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 Exterior Construction - 2023**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0178	0.6430	0.2454	2.9800e-003	0.1025	3.1100e-003	0.1056	0.0295	2.9700e-003	0.0325		320.9925	320.9925	0.0107	0.0462	335.0258
Worker	0.1410	0.1010	1.3620	3.8400e-003	0.4583	2.7600e-003	0.4610	0.1215	2.5400e-003	0.1241		388.4150	388.4150	0.0105	0.0101	391.6890
<b>Total</b>	<b>0.1588</b>	<b>0.7440</b>	<b>1.6074</b>	<b>6.8200e-003</b>	<b>0.5608</b>	<b>5.8700e-003</b>	<b>0.5666</b>	<b>0.1511</b>	<b>5.5100e-003</b>	<b>0.1566</b>		<b>709.4075</b>	<b>709.4075</b>	<b>0.0212</b>	<b>0.0563</b>	<b>726.7148</b>

**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
<b>Total</b>	<b>1.7136</b>	<b>13.6239</b>	<b>14.2145</b>	<b>0.0250</b>		<b>0.6136</b>	<b>0.6136</b>		<b>0.5880</b>	<b>0.5880</b>	<b>0.0000</b>	<b>2,289.5233</b>	<b>2,289.5233</b>	<b>0.4330</b>		<b>2,300.3479</b>

8631 Hayden Place - 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 Exterior Construction - 2023**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0178	0.6430	0.2454	2.9800e-003	0.1025	3.1100e-003	0.1056	0.0295	2.9700e-003	0.0325		320.9925	320.9925	0.0107	0.0462	335.0258
Worker	0.1410	0.1010	1.3620	3.8400e-003	0.4583	2.7600e-003	0.4610	0.1215	2.5400e-003	0.1241		388.4150	388.4150	0.0105	0.0101	391.6890
<b>Total</b>	<b>0.1588</b>	<b>0.7440</b>	<b>1.6074</b>	<b>6.8200e-003</b>	<b>0.5608</b>	<b>5.8700e-003</b>	<b>0.5666</b>	<b>0.1511</b>	<b>5.5100e-003</b>	<b>0.1566</b>		<b>709.4075</b>	<b>709.4075</b>	<b>0.0212</b>	<b>0.0563</b>	<b>726.7148</b>

**3.7 Exterior 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
<b>Total</b>	<b>1.5971</b>	<b>12.8235</b>	<b>14.1002</b>	<b>0.0250</b>		<b>0.5381</b>	<b>0.5381</b>		<b>0.5153</b>	<b>0.5153</b>		<b>2,289.6541</b>	<b>2,289.6541</b>	<b>0.4265</b>		<b>2,300.3154</b>

8631 Hayden Place - 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 Exterior Construction - 2024**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0172	0.6443	0.2402	2.9400e-003	0.1025	3.1300e-003	0.1056	0.0295	2.9900e-003	0.0325		316.1829	316.1829	0.0107	0.0456	330.0244
Worker	0.1318	0.0902	1.2667	3.7300e-003	0.4583	2.6400e-003	0.4609	0.1215	2.4300e-003	0.1240		377.4417	377.4417	9.4900e-003	9.4000e-003	380.4791
<b>Total</b>	<b>0.1490</b>	<b>0.7345</b>	<b>1.5069</b>	<b>6.6700e-003</b>	<b>0.5608</b>	<b>5.7700e-003</b>	<b>0.5665</b>	<b>0.1511</b>	<b>5.4200e-003</b>	<b>0.1565</b>		<b>693.6247</b>	<b>693.6247</b>	<b>0.0202</b>	<b>0.0550</b>	<b>710.5035</b>

**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
<b>Total</b>	<b>1.5971</b>	<b>12.8235</b>	<b>14.1002</b>	<b>0.0250</b>		<b>0.5381</b>	<b>0.5381</b>		<b>0.5153</b>	<b>0.5153</b>	<b>0.0000</b>	<b>2,289.6541</b>	<b>2,289.6541</b>	<b>0.4265</b>		<b>2,300.3154</b>

8631 Hayden Place - 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 Exterior Construction - 2024**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0172	0.6443	0.2402	2.9400e-003	0.1025	3.1300e-003	0.1056	0.0295	2.9900e-003	0.0325		316.1829	316.1829	0.0107	0.0456	330.0244
Worker	0.1318	0.0902	1.2667	3.7300e-003	0.4583	2.6400e-003	0.4609	0.1215	2.4300e-003	0.1240		377.4417	377.4417	9.4900e-003	9.4000e-003	380.4791
<b>Total</b>	<b>0.1490</b>	<b>0.7345</b>	<b>1.5069</b>	<b>6.6700e-003</b>	<b>0.5608</b>	<b>5.7700e-003</b>	<b>0.5665</b>	<b>0.1511</b>	<b>5.4200e-003</b>	<b>0.1565</b>		<b>693.6247</b>	<b>693.6247</b>	<b>0.0202</b>	<b>0.0550</b>	<b>710.5035</b>

**3.8 Interior 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					
Archit. Coating	2.1083					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
<b>Total</b>	<b>2.2999</b>	<b>1.3030</b>	<b>1.8111</b>	<b>2.9700e-003</b>		<b>0.0708</b>	<b>0.0708</b>		<b>0.0708</b>	<b>0.0708</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0168</b>		<b>281.8690</b>

8631 Hayden Place - 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**

**3.8 Interior Construction - 2023**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0275	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
<b>Total</b>	<b>0.0275</b>	<b>0.0197</b>	<b>0.2658</b>	<b>7.5000e-004</b>	<b>0.0894</b>	<b>5.4000e-004</b>	<b>0.0900</b>	<b>0.0237</b>	<b>5.0000e-004</b>	<b>0.0242</b>		<b>75.7883</b>	<b>75.7883</b>	<b>2.0500e-003</b>	<b>1.9700e-003</b>	<b>76.4271</b>

**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	2.1083					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
<b>Total</b>	<b>2.2999</b>	<b>1.3030</b>	<b>1.8111</b>	<b>2.9700e-003</b>		<b>0.0708</b>	<b>0.0708</b>		<b>0.0708</b>	<b>0.0708</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0168</b>		<b>281.8690</b>

8631 Hayden Place - 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**

**3.8 Interior Construction - 2023**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0275	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
<b>Total</b>	<b>0.0275</b>	<b>0.0197</b>	<b>0.2658</b>	<b>7.5000e-004</b>	<b>0.0894</b>	<b>5.4000e-004</b>	<b>0.0900</b>	<b>0.0237</b>	<b>5.0000e-004</b>	<b>0.0242</b>		<b>75.7883</b>	<b>75.7883</b>	<b>2.0500e-003</b>	<b>1.9700e-003</b>	<b>76.4271</b>

**3.8 Interior 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					
Archit. Coating	2.1083					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
<b>Total</b>	<b>2.2890</b>	<b>1.2188</b>	<b>1.8101</b>	<b>2.9700e-003</b>		<b>0.0609</b>	<b>0.0609</b>		<b>0.0609</b>	<b>0.0609</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0159</b>		<b>281.8443</b>

8631 Hayden Place - 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**

**3.8 Interior Construction - 2024**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0257	0.0176	0.2472	7.3000e-004	0.0894	5.1000e-004	0.0899	0.0237	4.7000e-004	0.0242		73.6472	73.6472	1.8500e-003	1.8300e-003	74.2398
<b>Total</b>	<b>0.0257</b>	<b>0.0176</b>	<b>0.2472</b>	<b>7.3000e-004</b>	<b>0.0894</b>	<b>5.1000e-004</b>	<b>0.0899</b>	<b>0.0237</b>	<b>4.7000e-004</b>	<b>0.0242</b>		<b>73.6472</b>	<b>73.6472</b>	<b>1.8500e-003</b>	<b>1.8300e-003</b>	<b>74.2398</b>

**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	2.1083					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
<b>Total</b>	<b>2.2890</b>	<b>1.2188</b>	<b>1.8101</b>	<b>2.9700e-003</b>		<b>0.0609</b>	<b>0.0609</b>		<b>0.0609</b>	<b>0.0609</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0159</b>		<b>281.8443</b>



8631 Hayden Place - 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**

**3.8 Interior Construction - 2024**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0257	0.0176	0.2472	7.3000e-004	0.0894	5.1000e-004	0.0899	0.0237	4.7000e-004	0.0242		73.6472	73.6472	1.8500e-003	1.8300e-003	74.2398
<b>Total</b>	<b>0.0257</b>	<b>0.0176</b>	<b>0.2472</b>	<b>7.3000e-004</b>	<b>0.0894</b>	<b>5.1000e-004</b>	<b>0.0899</b>	<b>0.0237</b>	<b>4.7000e-004</b>	<b>0.0242</b>		<b>73.6472</b>	<b>73.6472</b>	<b>1.8500e-003</b>	<b>1.8300e-003</b>	<b>74.2398</b>

**3.9 Paving - 2024**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8425	8.1030	11.7069	0.0179		0.3957	0.3957		0.3652	0.3652		1,710.2024	1,710.2024	0.5420		1,723.7529
Paving	0.0585					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.9009</b>	<b>8.1030</b>	<b>11.7069</b>	<b>0.0179</b>		<b>0.3957</b>	<b>0.3957</b>		<b>0.3652</b>	<b>0.3652</b>		<b>1,710.2024</b>	<b>1,710.2024</b>	<b>0.5420</b>		<b>1,723.7529</b>

8631 Hayden Place - 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**

**3.9 Paving - 2024**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0482	0.0330	0.4634	1.3700e-003	0.1677	9.7000e-004	0.1686	0.0445	8.9000e-004	0.0454		138.0884	138.0884	3.4700e-003	3.4400e-003	139.1997
<b>Total</b>	<b>0.0482</b>	<b>0.0330</b>	<b>0.4634</b>	<b>1.3700e-003</b>	<b>0.1677</b>	<b>9.7000e-004</b>	<b>0.1686</b>	<b>0.0445</b>	<b>8.9000e-004</b>	<b>0.0454</b>		<b>138.0884</b>	<b>138.0884</b>	<b>3.4700e-003</b>	<b>3.4400e-003</b>	<b>139.1997</b>

**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	0.8425	8.1030	11.7069	0.0179		0.3957	0.3957		0.3652	0.3652	0.0000	1,710.2024	1,710.2024	0.5420		1,723.7529
Paving	0.0585					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.9009</b>	<b>8.1030</b>	<b>11.7069</b>	<b>0.0179</b>		<b>0.3957</b>	<b>0.3957</b>		<b>0.3652</b>	<b>0.3652</b>	<b>0.0000</b>	<b>1,710.2024</b>	<b>1,710.2024</b>	<b>0.5420</b>		<b>1,723.7529</b>

8631 Hayden Place - 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**

**3.9 Paving - 2024**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0482	0.0330	0.4634	1.3700e-003	0.1677	9.7000e-004	0.1686	0.0445	8.9000e-004	0.0454		138.0884	138.0884	3.4700e-003	3.4400e-003	139.1997
<b>Total</b>	<b>0.0482</b>	<b>0.0330</b>	<b>0.4634</b>	<b>1.3700e-003</b>	<b>0.1677</b>	<b>9.7000e-004</b>	<b>0.1686</b>	<b>0.0445</b>	<b>8.9000e-004</b>	<b>0.0454</b>		<b>138.0884</b>	<b>138.0884</b>	<b>3.4700e-003</b>	<b>3.4400e-003</b>	<b>139.1997</b>

**4.0 Operational Detail - Mobile**

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**4.1 Mitigation Measures Mobile**

8631 Hayden Place - Los Angeles-South Coast County, Winter

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.2846	1.7030	14.0979	0.0306	3.1612	0.0262	3.1874	0.8420	0.0244	0.8664		3,121,206 4	3,121,206 4	0.2085	0.1353	3,166,730 0
Unmitigated	1.2846	1.7030	14.0979	0.0306	3.1612	0.0262	3.1874	0.8420	0.0244	0.8664		3,121,206 4	3,121,206 4	0.2085	0.1353	3,166,730 0

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	230.54	92.50	232.40	934,746	934,746
General Light Industry	49.60	19.90	50.00	201,107	201,107
General Office Building	77.92	17.68	5.60	190,011	190,011
Parking Lot	0.00	0.00	0.00		
<b>Total</b>	<b>358.06</b>	<b>130.08</b>	<b>288.00</b>	<b>1,325,864</b>	<b>1,325,864</b>

**4.3 Trip Type Information**

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3
General Light Industry	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

**4.4 Fleet Mix**

8631 Hayden Place - 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**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.546774	0.061880	0.186704	0.127505	0.022909	0.005912	0.010702	0.008032	0.000940	0.000617	0.023937	0.000692	0.003397
General Office Building	0.546774	0.061880	0.186704	0.127505	0.022909	0.005912	0.010702	0.008032	0.000940	0.000617	0.023937	0.000692	0.003397
Parking Lot	0.546774	0.061880	0.186704	0.127505	0.022909	0.005912	0.010702	0.008032	0.000940	0.000617	0.023937	0.000692	0.003397

**5.0 Energy Detail**

Historical Energy Use: Y

**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	0.0360	0.3271	0.2748	1.9600e-003		0.0249	0.0249		0.0249	0.0249		392.5299	392.5299	7.5200e-003	7.2000e-003	394.8625
NaturalGas Unmitigated	0.0360	0.3271	0.2748	1.9600e-003		0.0249	0.0249		0.0249	0.0249		392.5299	392.5299	7.5200e-003	7.2000e-003	394.8625

8631 Hayden Place - 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**

**5.2 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					
General Light Industry	2521.38	0.0272	0.2472	0.2076	1.4800e-003		0.0188	0.0188		0.0188	0.0188		296.6330	296.6330	5.6900e-003	5.4400e-003	298.3958
General Light Industry	542.466	5.8500e-003	0.0532	0.0447	3.2000e-004		4.0400e-003	4.0400e-003		4.0400e-003	4.0400e-003		63.8195	63.8195	1.2200e-003	1.1700e-003	64.1988
General Office Building	272.658	2.9400e-003	0.0267	0.0225	1.6000e-004		2.0300e-003	2.0300e-003		2.0300e-003	2.0300e-003		32.0774	32.0774	6.1000e-004	5.9000e-004	32.2680
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0360</b>	<b>0.3271</b>	<b>0.2748</b>	<b>1.9600e-003</b>		<b>0.0249</b>	<b>0.0249</b>		<b>0.0249</b>	<b>0.0249</b>		<b>392.5299</b>	<b>392.5299</b>	<b>7.5200e-003</b>	<b>7.2000e-003</b>	<b>394.8625</b>

8631 Hayden Place - 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**

**5.2 Energy by Land Use - NaturalGas**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0.542466	5.8500e-003	0.0532	0.0447	3.2000e-004		4.0400e-003	4.0400e-003		4.0400e-003	4.0400e-003		63.8195	63.8195	1.2200e-003	1.1700e-003	64.1988
General Light Industry	2.52138	0.0272	0.2472	0.2076	1.4800e-003		0.0188	0.0188		0.0188	0.0188		296.6330	296.6330	5.6900e-003	5.4400e-003	298.3958
General Office Building	0.272658	2.9400e-003	0.0267	0.0225	1.6000e-004		2.0300e-003	2.0300e-003		2.0300e-003	2.0300e-003		32.0774	32.0774	6.1000e-004	5.9000e-004	32.2680
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0360</b>	<b>0.3271</b>	<b>0.2748</b>	<b>1.9600e-003</b>		<b>0.0249</b>	<b>0.0249</b>		<b>0.0249</b>	<b>0.0249</b>		<b>392.5299</b>	<b>392.5299</b>	<b>7.5200e-003</b>	<b>7.2000e-003</b>	<b>394.8625</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

8631 Hayden Place - Los Angeles-South Coast County, Winter

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.4565	1.4000e-004	0.0153	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0327	0.0327	9.0000e-005		0.0349
Unmitigated	1.4565	1.4000e-004	0.0153	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0327	0.0327	9.0000e-005		0.0349

**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	0.1664					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.2888					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.4200e-003	1.4000e-004	0.0153	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0327	0.0327	9.0000e-005		0.0349
<b>Total</b>	<b>1.4565</b>	<b>1.4000e-004</b>	<b>0.0153</b>	<b>0.0000</b>		<b>5.0000e-005</b>	<b>5.0000e-005</b>		<b>5.0000e-005</b>	<b>5.0000e-005</b>		<b>0.0327</b>	<b>0.0327</b>	<b>9.0000e-005</b>		<b>0.0349</b>



8631 Hayden Place - 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**

**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	0.1664					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.2888					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.4200e-003	1.4000e-004	0.0153	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0327	0.0327	9.0000e-005		0.0349
<b>Total</b>	<b>1.4565</b>	<b>1.4000e-004</b>	<b>0.0153</b>	<b>0.0000</b>		<b>5.0000e-005</b>	<b>5.0000e-005</b>		<b>5.0000e-005</b>	<b>5.0000e-005</b>		<b>0.0327</b>	<b>0.0327</b>	<b>9.0000e-005</b>		<b>0.0349</b>

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

8631 Hayden Place - 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**

**8.0 Waste Detail**

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**8.1 Mitigation Measures Waste**

**9.0 Operational Offroad**

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

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**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
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**User Defined Equipment**

Equipment Type	Number
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**11.0 Vegetation**

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Hayden Place - Los Angeles-South Coast County, Summer

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

**Hayden Place**

**Los Angeles-South Coast County, Summer**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	245.00	1000sqft	1.00	245,000.00	0
Enclosed Parking with Elevator	750.00	Space	1.00	310,000.00	0
City Park	0.83	Acre	0.68	36,334.00	0
User Defined Residential	1.00	Dwelling Unit	0.01	1.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	33
<b>Climate Zone</b>	11			<b>Operational Year</b>	2024
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MWhr)</b>	334.37	<b>CH4 Intensity (lb/MWhr)</b>	0.033	<b>N2O Intensity (lb/MWhr)</b>	0.004

**1.3 User Entered Comments & Non-Default Data**

Project Characteristics - Adjusted CO2e based off of Power Content Label

Land Use - See Construction Assumptions

Construction Phase - See Construction Assumptions

Off-road Equipment - See Construction Equipment

Off-road Equipment - See Construction Assumptions

Off-road Equipment - See Construction Assumptions

Off-road Equipment - See Construction Assumptions

Off-road Equipment - See Construction Assumptions

Off-road Equipment - See Construction Assumptions

Hayden Place - Los Angeles-South Coast County, Summer

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

Off-road Equipment - See Construction Assumptions

Off-road Equipment - See Construction Assumptions

Trips and VMT - On-road vehicles calculated on spreadsheet

Demolition -

Grading -

Energy Use - Added Lighting Intensity for City parking area

Water And Wastewater - Use Irrigation Calculation Information

Construction Off-road Equipment Mitigation - See Construction Assumptions

Architectural Coating - No Residential Uses

Vehicle Trips - No Residential Uses

Fleet Mix - No Residential Uses

Woodstoves - 2 BBQ, 4 Firepits,& 1 Fireplace

Area Coating - No Residential Uses

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Residential_Exterior	1.00	0.00
tblArchitecturalCoating	ConstArea_Residential_Interior	2.00	0.00
tblAreaCoating	Area_Residential_Exterior	1	0
tblAreaCoating	Area_Residential_Interior	2	0
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	15.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00

Hayden Place - Los Angeles-South Coast County, Summer

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

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	18.00	26.00
tblConstructionPhase	NumDays	230.00	236.00
tblConstructionPhase	NumDays	230.00	288.00
tblConstructionPhase	NumDays	20.00	26.00
tblConstructionPhase	NumDays	8.00	54.00
tblConstructionPhase	NumDays	8.00	16.00

Hayden Place - Los Angeles-South Coast County, Summer

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

tblConstructionPhase	NumDays	5.00	27.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblEnergyUse	LightingElect	0.00	0.35
tblFireplaces	NumberGas	0.85	7.00
tblFireplaces	NumberWood	0.05	0.00
tblFleetMix	HHD	8.0790e-003	0.00
tblFleetMix	LDA	0.54	0.50
tblFleetMix	LDT1	0.06	0.50
tblFleetMix	LDT2	0.19	0.00
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	6.2390e-003	0.00
tblFleetMix	MCY	0.02	0.00
tblFleetMix	MDV	0.13	0.00
tblFleetMix	MH	3.3520e-003	0.00
tblFleetMix	MHD	0.01	0.00
tblFleetMix	OBUS	9.2300e-004	0.00
tblFleetMix	SBUS	7.0200e-004	0.00
tblFleetMix	UBUS	6.0400e-004	0.00
tblGrading	MaterialExported	0.00	170,000.00
tblLandUse	LandUseSquareFeet	300,000.00	310,000.00
tblLandUse	LandUseSquareFeet	36,154.80	36,334.00
tblLandUse	LandUseSquareFeet	0.00	1.00

Hayden Place - Los Angeles-South Coast County, Summer

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

tblLandUse	LotAcreage	5.62	1.00
tblLandUse	LotAcreage	6.75	1.00
tblLandUse	LotAcreage	0.83	0.68
tblLandUse	LotAcreage	0.00	0.01
tblLandUse	Population	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblProjectCharacteristics	CO2IntensityFactor	390.98	334.37
tblTripsAndVMT	HaulingTripNumber	314.00	0.00
tblTripsAndVMT	HaulingTripNumber	21,250.00	0.00
tblTripsAndVMT	VendorTripNumber	94.00	0.00
tblTripsAndVMT	VendorTripNumber	94.00	0.00
tblTripsAndVMT	WorkerTripNumber	20.00	0.00
tblTripsAndVMT	WorkerTripNumber	13.00	0.00
tblTripsAndVMT	WorkerTripNumber	20.00	0.00
tblTripsAndVMT	WorkerTripNumber	20.00	0.00
tblTripsAndVMT	WorkerTripNumber	15.00	0.00
tblTripsAndVMT	WorkerTripNumber	217.00	0.00
tblTripsAndVMT	WorkerTripNumber	217.00	0.00
tblTripsAndVMT	WorkerTripNumber	43.00	0.00
tblVehicleTrips	HO_TL	8.70	0.00
tblVehicleTrips	HO_TTP	40.60	0.00
tblVehicleTrips	HS_TL	5.90	0.00
tblVehicleTrips	HS_TTP	19.20	0.00
tblVehicleTrips	HW_TL	14.70	0.00
tblVehicleTrips	HW_TTP	40.20	0.00

Hayden Place - Los Angeles-South Coast County, Summer

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

tblWater	OutdoorWaterUseRate	500,422.17	212,589.00
tblWoodstoves	NumberCatalytic	0.05	0.00
tblWoodstoves	NumberNoncatalytic	0.05	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

**2.0 Emissions Summary**

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Hayden Place - Los Angeles-South Coast County, Summer

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

**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	6.5429	59.3259	67.3523	0.1315	3.4986	2.8291	6.3276	0.5067	2.6483	3.1550	0.0000	12,633.55 64	12,633.55 64	3.4445	0.0000	12,719.66 80
2024	92.3811	23.2099	31.4219	0.0547	0.0000	0.8170	0.8170	0.0000	0.7616	0.7616	0.0000	5,257.119 6	5,257.119 6	1.5129	0.0000	5,294.941 5
<b>Maximum</b>	<b>92.3811</b>	<b>59.3259</b>	<b>67.3523</b>	<b>0.1315</b>	<b>3.4986</b>	<b>2.8291</b>	<b>6.3276</b>	<b>0.5067</b>	<b>2.6483</b>	<b>3.1550</b>	<b>0.0000</b>	<b>12,633.55 64</b>	<b>12,633.55 64</b>	<b>3.4445</b>	<b>0.0000</b>	<b>12,719.66 80</b>

**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	3.2380	64.5541	85.7769	0.1315	1.3645	3.4589	4.8234	0.1976	3.4589	3.6565	0.0000	12,633.55 64	12,633.55 64	3.4445	0.0000	12,719.66 80
2024	92.0601	28.7537	37.5383	0.0547	0.0000	1.8090	1.8090	0.0000	1.8079	1.8079	0.0000	5,257.119 6	5,257.119 6	1.5129	0.0000	5,294.941 5
<b>Maximum</b>	<b>92.0601</b>	<b>64.5541</b>	<b>85.7769</b>	<b>0.1315</b>	<b>1.3645</b>	<b>3.4589</b>	<b>4.8234</b>	<b>0.1976</b>	<b>3.4589</b>	<b>3.6565</b>	<b>0.0000</b>	<b>12,633.55 64</b>	<b>12,633.55 64</b>	<b>3.4445</b>	<b>0.0000</b>	<b>12,719.66 80</b>

## Hayden Place - Los Angeles-South Coast County, Summer

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	3.67	-13.05	-24.85	0.00	61.00	-44.48	7.17	61.00	-54.45	-39.52	0.00	0.00	0.00	0.00	0.00	0.00

Hayden Place - Los Angeles-South Coast County, Summer

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

**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	5.6365	0.1180	0.2334	7.5000e-004		0.0102	0.0102		0.0102	0.0102	0.0000	148.6018	148.6018	3.5500e-003	2.7200e-003	149.5005
Energy	0.0746	0.6785	0.5699	4.0700e-003		0.0516	0.0516		0.0516	0.0516		814.1660	814.1660	0.0156	0.0149	819.0042
Mobile	6.9874	6.9837	70.2147	0.1551	16.1956	0.1108	16.3064	4.3140	0.1028	4.4168		16,088.2026	16,088.2026	1.0392	0.6386	16,304.4900
<b>Total</b>	<b>12.6986</b>	<b>7.7802</b>	<b>71.0180</b>	<b>0.1600</b>	<b>16.1956</b>	<b>0.1725</b>	<b>16.3682</b>	<b>4.3140</b>	<b>0.1646</b>	<b>4.4786</b>	<b>0.0000</b>	<b>17,050.9704</b>	<b>17,050.9704</b>	<b>1.0584</b>	<b>0.6563</b>	<b>17,272.9947</b>

**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	5.6365	0.1180	0.2334	7.5000e-004		0.0102	0.0102		0.0102	0.0102	0.0000	148.6018	148.6018	3.5500e-003	2.7200e-003	149.5005
Energy	0.0746	0.6785	0.5699	4.0700e-003		0.0516	0.0516		0.0516	0.0516		814.1660	814.1660	0.0156	0.0149	819.0042
Mobile	6.9874	6.9837	70.2147	0.1551	16.1956	0.1108	16.3064	4.3140	0.1028	4.4168		16,088.2026	16,088.2026	1.0392	0.6386	16,304.4900
<b>Total</b>	<b>12.6986</b>	<b>7.7802</b>	<b>71.0180</b>	<b>0.1600</b>	<b>16.1956</b>	<b>0.1725</b>	<b>16.3682</b>	<b>4.3140</b>	<b>0.1646</b>	<b>4.4786</b>	<b>0.0000</b>	<b>17,050.9704</b>	<b>17,050.9704</b>	<b>1.0584</b>	<b>0.6563</b>	<b>17,272.9947</b>

Hayden Place - Los Angeles-South Coast County, Summer

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

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

**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	4/1/2023	5/1/2023	6	26	
2	Site Preparation	Site Preparation	5/1/2023	5/31/2023	6	27	
3	Grading	Grading	5/1/2023	7/1/2023	6	54	
4	Drainage/Utilities/Trenching	Trenching	5/1/2023	8/15/2023	6	92	
5	Foundations/Concrete Pour	Grading	8/15/2023	9/1/2023	6	16	
6	Exterior Construction	Building Construction	9/1/2023	6/1/2024	6	236	
7	Interior Construction	Building Construction	10/1/2023	9/1/2024	6	288	
8	Paving	Architectural Coating	9/1/2024	10/1/2024	6	26	

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 27**

**Acres of Paving: 1**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 369,000; Non-Residential Outdoor: 123,000; Striped Parking Area: 18,600 (Architectural Coating – sqft)**

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Air Compressors	1	8.00	78	0.48
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Crushing/Proc. Equipment	1	8.00	85	0.78

Hayden Place - Los Angeles-South Coast County, Summer

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

Demolition	Excavators	1	8.00	158	0.38
Demolition	Other Construction Equipment	2	8.00	172	0.42
Demolition	Rubber Tired Loaders	1	8.00	203	0.36
Demolition	Sweepers/Scrubbers	1	8.00	64	0.46
Site Preparation	Crushing/Proc. Equipment	1	8.00	85	0.78
Site Preparation	Other Construction Equipment	1	8.00	172	0.42
Site Preparation	Rubber Tired Loaders	1	8.00	203	0.36
Site Preparation	Sweepers/Scrubbers	1	8.00	64	0.46
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Bore/Drill Rigs	2	8.00	221	0.50
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Plate Compactors	1	8.00	8	0.43
Grading	Rubber Tired Loaders	1	8.00	203	0.36
Grading	Sweepers/Scrubbers	1	8.00	64	0.46
Drainage/Utilities/Trenching	Cement and Mortar Mixers	2	8.00	9	0.56
Drainage/Utilities/Trenching	Skid Steer Loaders	2	8.00	65	0.37
Drainage/Utilities/Trenching	Sweepers/Scrubbers	1	8.00	64	0.46
Drainage/Utilities/Trenching	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Drainage/Utilities/Trenching	Trenchers	1	8.00	78	0.50
Foundations/Concrete Pour	Cranes	1	8.00	231	0.29
Foundations/Concrete Pour	Dumpers/Tenders	1	8.00	16	0.38
Foundations/Concrete Pour	Generator Sets	1	8.00	84	0.74
Foundations/Concrete Pour	Rough Terrain Forklifts	1	8.00	100	0.40
Foundations/Concrete Pour	Skid Steer Loaders	1	8.00	65	0.37
Foundations/Concrete Pour	Sweepers/Scrubbers	1	8.00	64	0.46
Exterior Construction	Cranes	1	8.00	231	0.29
Exterior Construction	Generator Sets	1	8.00	84	0.74
Exterior Construction	Rough Terrain Forklifts	1	8.00	100	0.40

Hayden Place - Los Angeles-South Coast County, Summer

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

Exterior Construction	Skid Steer Loaders	1	8.00	65	0.37
Exterior Construction	Sweepers/Scrubbers	1	8.00	64	0.46
Interior Construction	Aerial Lifts	15	8.00	63	0.31
Interior Construction	Cement and Mortar Mixers	1	8.00	9	0.56
Interior Construction	Cranes	1	8.00	231	0.29
Interior Construction	Sweepers/Scrubbers	1	8.00	64	0.46
Paving	Rough Terrain Forklifts	1	8.00	100	0.40
Paving	Sweepers/Scrubbers	1	8.00	64	0.46

**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	8	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	5	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Drainage/Utilities/Trenching	8	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Foundations/Concrete Pour	6	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Exterior Construction	5	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Interior Construction	18	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	2	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Hayden Place - Los Angeles-South Coast County, Summer

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

**3.2 Demolition - 2023**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive 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					2.6123	0.0000	2.6123	0.3955	0.0000	0.3955			0.0000			0.0000
Off-Road	2.3775	20.0904	25.0900	0.0436		1.0085	1.0085		0.9580	0.9580		4,180.8264	4,180.8264	0.9156		4,203.7164
<b>Total</b>	<b>2.3775</b>	<b>20.0904</b>	<b>25.0900</b>	<b>0.0436</b>	<b>2.6123</b>	<b>1.0085</b>	<b>3.6208</b>	<b>0.3955</b>	<b>0.9580</b>	<b>1.3535</b>		<b>4,180.8264</b>	<b>4,180.8264</b>	<b>0.9156</b>		<b>4,203.7164</b>

**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

Hayden Place - Los Angeles-South Coast County, Summer

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

**3.2 Demolition - 2023**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.0188	0.0000	1.0188	0.1543	0.0000	0.1543			0.0000			0.0000
Off-Road	0.9945	20.6522	29.2470	0.0436		1.1686	1.1686		1.1686	1.1686	0.0000	4,180.826 4	4,180.826 4	0.9156		4,203.716 4
<b>Total</b>	<b>0.9945</b>	<b>20.6522</b>	<b>29.2470</b>	<b>0.0436</b>	<b>1.0188</b>	<b>1.1686</b>	<b>2.1875</b>	<b>0.1543</b>	<b>1.1686</b>	<b>1.3229</b>	<b>0.0000</b>	<b>4,180.826 4</b>	<b>4,180.826 4</b>	<b>0.9156</b>		<b>4,203.716 4</b>

**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>



Hayden Place - Los Angeles-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule 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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	1.4025	12.3181	13.9888	0.0251		0.6068	0.6068		0.5706	0.5706		2,416.1058	2,416.1058	0.6063		2,431.2621
<b>Total</b>	<b>1.4025</b>	<b>12.3181</b>	<b>13.9888</b>	<b>0.0251</b>	<b>0.0000</b>	<b>0.6068</b>	<b>0.6068</b>	<b>0.0000</b>	<b>0.5706</b>	<b>0.5706</b>		<b>2,416.1058</b>	<b>2,416.1058</b>	<b>0.6063</b>		<b>2,431.2621</b>

**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

Hayden Place - Los Angeles-South Coast County, Summer

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

**3.3 Site Preparation - 2023**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.5862	12.3072	16.6551	0.0251		0.7019	0.7019		0.7019	0.7019	0.0000	2,416.1058	2,416.1058	0.6063		2,431.2621
<b>Total</b>	<b>0.5862</b>	<b>12.3072</b>	<b>16.6551</b>	<b>0.0251</b>	<b>0.0000</b>	<b>0.7019</b>	<b>0.7019</b>	<b>0.0000</b>	<b>0.7019</b>	<b>0.7019</b>	<b>0.0000</b>	<b>2,416.1058</b>	<b>2,416.1058</b>	<b>0.6063</b>		<b>2,431.2621</b>

**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

Hayden Place - Los Angeles-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule 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					0.8863	0.0000	0.8863	0.1112	0.0000	0.1112			0.0000			0.0000
Off-Road	1.6837	16.4413	15.9127	0.0452		0.6419	0.6419		0.5913	0.5913		4,358.0899	4,358.0899	1.4019		4,393.1380
<b>Total</b>	<b>1.6837</b>	<b>16.4413</b>	<b>15.9127</b>	<b>0.0452</b>	<b>0.8863</b>	<b>0.6419</b>	<b>1.5282</b>	<b>0.1112</b>	<b>0.5913</b>	<b>0.7025</b>		<b>4,358.0899</b>	<b>4,358.0899</b>	<b>1.4019</b>		<b>4,393.1380</b>

**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

Hayden Place - Los Angeles-South Coast County, Summer

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

**3.4 Grading - 2023**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.3457	0.0000	0.3457	0.0434	0.0000	0.0434			0.0000			0.0000
Off-Road	1.1412	21.7577	26.9688	0.0452		0.9221	0.9221		0.9221	0.9221	0.0000	4,358.0899	4,358.0899	1.4019		4,393.1379
<b>Total</b>	<b>1.1412</b>	<b>21.7577</b>	<b>26.9688</b>	<b>0.0452</b>	<b>0.3457</b>	<b>0.9221</b>	<b>1.2677</b>	<b>0.0434</b>	<b>0.9221</b>	<b>0.9654</b>	<b>0.0000</b>	<b>4,358.0899</b>	<b>4,358.0899</b>	<b>1.4019</b>		<b>4,393.1379</b>

**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

Hayden Place - Los Angeles-South Coast County, Summer

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

**3.5 Drainage/Utilities/Trenching - 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	1.0791	10.4761	12.3608	0.0177		0.5719	0.5719		0.5284	0.5284		1,678.534 4	1,678.534 4	0.5207		1,691.551 5
<b>Total</b>	<b>1.0791</b>	<b>10.4761</b>	<b>12.3608</b>	<b>0.0177</b>		<b>0.5719</b>	<b>0.5719</b>		<b>0.5284</b>	<b>0.5284</b>		<b>1,678.534 4</b>	<b>1,678.534 4</b>	<b>0.5207</b>		<b>1,691.551 5</b>

**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

Hayden Place - Los Angeles-South Coast County, Summer

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

**3.5 Drainage/Utilities/Trenching - 2023**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5161	9.8370	12.9059	0.0177		0.6663	0.6663		0.6663	0.6663	0.0000	1,678.5343	1,678.5343	0.5207		1,691.5515
<b>Total</b>	<b>0.5161</b>	<b>9.8370</b>	<b>12.9059</b>	<b>0.0177</b>		<b>0.6663</b>	<b>0.6663</b>		<b>0.6663</b>	<b>0.6663</b>	<b>0.0000</b>	<b>1,678.5343</b>	<b>1,678.5343</b>	<b>0.5207</b>		<b>1,691.5515</b>

**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

Hayden Place - Los Angeles-South Coast County, Summer

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

**3.6 Foundations/Concrete Pour - 2023**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	1.0836	10.9656	11.3458	0.0212		0.4880	0.4880		0.4606	0.4606		2,023.260 2	2,023.260 2	0.4671		2,034.937 7
<b>Total</b>	<b>1.0836</b>	<b>10.9656</b>	<b>11.3458</b>	<b>0.0212</b>	<b>0.0000</b>	<b>0.4880</b>	<b>0.4880</b>	<b>0.0000</b>	<b>0.4606</b>	<b>0.4606</b>		<b>2,023.260 2</b>	<b>2,023.260 2</b>	<b>0.4671</b>		<b>2,034.937 7</b>

**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

Hayden Place - Los Angeles-South Coast County, Summer

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

**3.6 Foundations/Concrete Pour - 2023**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.5518	10.5460	13.3701	0.0212		0.6177	0.6177		0.6164	0.6164	0.0000	2,023.260 2	2,023.260 2	0.4671		2,034.937 7
<b>Total</b>	<b>0.5518</b>	<b>10.5460</b>	<b>13.3701</b>	<b>0.0212</b>	<b>0.0000</b>	<b>0.6177</b>	<b>0.6177</b>	<b>0.0000</b>	<b>0.6164</b>	<b>0.6164</b>	<b>0.0000</b>	<b>2,023.260 2</b>	<b>2,023.260 2</b>	<b>0.4671</b>		<b>2,034.937 7</b>

**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>



Hayden Place - Los Angeles-South Coast County, Summer

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

**3.7 Exterior 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	1.0102	10.5010	11.0950	0.0204		0.4706	0.4706		0.4432	0.4432		1,962.3199	1,962.3199	0.4606		1,973.8339
<b>Total</b>	<b>1.0102</b>	<b>10.5010</b>	<b>11.0950</b>	<b>0.0204</b>		<b>0.4706</b>	<b>0.4706</b>		<b>0.4432</b>	<b>0.4432</b>		<b>1,962.3199</b>	<b>1,962.3199</b>	<b>0.4606</b>		<b>1,973.8339</b>

**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

Hayden Place - Los Angeles-South Coast County, Summer

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

**3.7 Exterior Construction - 2023**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4784	10.0815	13.1193	0.0204		0.6003	0.6003		0.5991	0.5991	0.0000	1,962.3199	1,962.3199	0.4606		1,973.8339
<b>Total</b>	<b>0.4784</b>	<b>10.0815</b>	<b>13.1193</b>	<b>0.0204</b>		<b>0.6003</b>	<b>0.6003</b>		<b>0.5991</b>	<b>0.5991</b>	<b>0.0000</b>	<b>1,962.3199</b>	<b>1,962.3199</b>	<b>0.4606</b>		<b>1,973.8339</b>

**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

Hayden Place - Los Angeles-South Coast County, Summer

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

**3.7 Exterior 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	0.9539	9.8344	11.0296	0.0204		0.4221	0.4221		0.3972	0.3972		1,962.3218	1,962.3218	0.4584		1,973.7810
<b>Total</b>	<b>0.9539</b>	<b>9.8344</b>	<b>11.0296</b>	<b>0.0204</b>		<b>0.4221</b>	<b>0.4221</b>		<b>0.3972</b>	<b>0.3972</b>		<b>1,962.3218</b>	<b>1,962.3218</b>	<b>0.4584</b>		<b>1,973.7810</b>

**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

Hayden Place - Los Angeles-South Coast County, Summer

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

**3.7 Exterior Construction - 2024**

**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	0.4772	10.0648	13.1199	0.0204		0.5990	0.5990		0.5979	0.5979	0.0000	1,962.3218	1,962.3218	0.4584		1,973.7810
<b>Total</b>	<b>0.4772</b>	<b>10.0648</b>	<b>13.1199</b>	<b>0.0204</b>		<b>0.5990</b>	<b>0.5990</b>		<b>0.5979</b>	<b>0.5979</b>	<b>0.0000</b>	<b>1,962.3218</b>	<b>1,962.3218</b>	<b>0.4584</b>		<b>1,973.7810</b>

**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

Hayden Place - Los Angeles-South Coast County, Summer

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

**3.8 Interior 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	1.1114	13.8882	20.4415	0.0342		0.4206	0.4206		0.3881	0.3881		3,294.8097	3,294.8097	1.0545		3,321.1726
<b>Total</b>	<b>1.1114</b>	<b>13.8882</b>	<b>20.4415</b>	<b>0.0342</b>		<b>0.4206</b>	<b>0.4206</b>		<b>0.3881</b>	<b>0.3881</b>		<b>3,294.8097</b>	<b>3,294.8097</b>	<b>1.0545</b>		<b>3,321.1726</b>

**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

Hayden Place - Los Angeles-South Coast County, Summer

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

**3.8 Interior Construction - 2023**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8829	18.6889	24.4184	0.0342		1.2100	1.2100		1.2100	1.2100	0.0000	3,294.8097	3,294.8097	1.0545		3,321.1726
<b>Total</b>	<b>0.8829</b>	<b>18.6889</b>	<b>24.4184</b>	<b>0.0342</b>		<b>1.2100</b>	<b>1.2100</b>		<b>1.2100</b>	<b>1.2100</b>	<b>0.0000</b>	<b>3,294.8097</b>	<b>3,294.8097</b>	<b>1.0545</b>		<b>3,321.1726</b>

**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

Hayden Place - Los Angeles-South Coast County, Summer

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

**3.8 Interior 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	1.0820	13.3755	20.3923	0.0342		0.3949	0.3949		0.3644	0.3644		3,294.7978	3,294.7978	1.0545		3,321.1606
<b>Total</b>	<b>1.0820</b>	<b>13.3755</b>	<b>20.3923</b>	<b>0.0342</b>		<b>0.3949</b>	<b>0.3949</b>		<b>0.3644</b>	<b>0.3644</b>		<b>3,294.7978</b>	<b>3,294.7978</b>	<b>1.0545</b>		<b>3,321.1606</b>

**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

Hayden Place - Los Angeles-South Coast County, Summer

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

**3.8 Interior Construction - 2024**

**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	0.8829	18.6889	24.4184	0.0342		1.2100	1.2100		1.2100	1.2100	0.0000	3,294.7978	3,294.7978	1.0545		3,321.1606
<b>Total</b>	<b>0.8829</b>	<b>18.6889</b>	<b>24.4184</b>	<b>0.0342</b>		<b>1.2100</b>	<b>1.2100</b>		<b>1.2100</b>	<b>1.2100</b>	<b>0.0000</b>	<b>3,294.7978</b>	<b>3,294.7978</b>	<b>1.0545</b>		<b>3,321.1606</b>

**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>



Hayden Place - Los Angeles-South Coast County, Summer

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

**3.9 Paving - 2024**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	91.0243					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2748	2.9591	4.2065	5.9900e-003		0.1390	0.1390		0.1279	0.1279		579.9126	579.9126	0.1876		584.6015
<b>Total</b>	<b>91.2991</b>	<b>2.9591</b>	<b>4.2065</b>	<b>5.9900e-003</b>		<b>0.1390</b>	<b>0.1390</b>		<b>0.1279</b>	<b>0.1279</b>		<b>579.9126</b>	<b>579.9126</b>	<b>0.1876</b>		<b>584.6015</b>

**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

Hayden Place - Los Angeles-South Coast County, Summer

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

**3.9 Paving - 2024**

**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	91.0243					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1530	3.1576	4.4222	5.9900e-003		0.2031	0.2031		0.2020	0.2020	0.0000	579.9126	579.9126	0.1876		584.6015
<b>Total</b>	<b>91.1773</b>	<b>3.1576</b>	<b>4.4222</b>	<b>5.9900e-003</b>		<b>0.2031</b>	<b>0.2031</b>		<b>0.2020</b>	<b>0.2020</b>	<b>0.0000</b>	<b>579.9126</b>	<b>579.9126</b>	<b>0.1876</b>		<b>584.6015</b>

**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

Hayden Place - Los Angeles-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule 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	6.9874	6.9837	70.2147	0.1551	16.1956	0.1108	16.3064	4.3140	0.1028	4.4168		16,088.20 26	16,088.20 26	1.0392	0.6386	16,304.49 00
Unmitigated	6.9874	6.9837	70.2147	0.1551	16.1956	0.1108	16.3064	4.3140	0.1028	4.4168		16,088.20 26	16,088.20 26	1.0392	0.6386	16,304.49 00

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.65	1.63	1.82	2,747	2,747
Enclosed Parking with Elevator	0.00	0.00	0.00		
General Office Building	2,386.30	541.45	171.50	5,819,086	5,819,086
User Defined Residential	0.00	0.00	0.00		
<b>Total</b>	<b>2,386.95</b>	<b>543.08</b>	<b>173.32</b>	<b>5,821,833</b>	<b>5,821,833</b>

**4.3 Trip Type Information**

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4

Hayden Place - Los Angeles-South Coast County, Summer

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

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
User Defined Residential	0.00	0.00	0.00	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
City Park	0.542464	0.063735	0.188241	0.126899	0.023249	0.006239	0.010717	0.008079	0.000923	0.000604	0.024795	0.000702	0.003352
Enclosed Parking with Elevator	0.542464	0.063735	0.188241	0.126899	0.023249	0.006239	0.010717	0.008079	0.000923	0.000604	0.024795	0.000702	0.003352
General Office Building	0.542464	0.063735	0.188241	0.126899	0.023249	0.006239	0.010717	0.008079	0.000923	0.000604	0.024795	0.000702	0.003352
User Defined Residential	0.500000	0.500000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day										lb/day					
NaturalGas Mitigated	0.0746	0.6785	0.5699	4.0700e-003		0.0516	0.0516		0.0516	0.0516		814.1660	814.1660	0.0156	0.0149	819.0042
NaturalGas Unmitigated	0.0746	0.6785	0.5699	4.0700e-003		0.0516	0.0516		0.0516	0.0516		814.1660	814.1660	0.0156	0.0149	819.0042

Hayden Place - Los Angeles-South Coast County, Summer

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

**5.2 Energy by Land Use - NaturalGas**

**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
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
General Office Building	6920.41	0.0746	0.6785	0.5699	4.0700e-003		0.0516	0.0516		0.0516	0.0516		814.1660	814.1660	0.0156	0.0149	819.0042
User Defined Residential	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
<b>Total</b>		<b>0.0746</b>	<b>0.6785</b>	<b>0.5699</b>	<b>4.0700e-003</b>		<b>0.0516</b>	<b>0.0516</b>		<b>0.0516</b>	<b>0.0516</b>		<b>814.1660</b>	<b>814.1660</b>	<b>0.0156</b>	<b>0.0149</b>	<b>819.0042</b>

Hayden Place - Los Angeles-South Coast County, Summer

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

**5.2 Energy by Land Use - NaturalGas**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
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
General Office Building	6.92041	0.0746	0.6785	0.5699	4.0700e-003		0.0516	0.0516		0.0516	0.0516		814.1660	814.1660	0.0156	0.0149	819.0042
User Defined Residential	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
<b>Total</b>		<b>0.0746</b>	<b>0.6785</b>	<b>0.5699</b>	<b>4.0700e-003</b>		<b>0.0516</b>	<b>0.0516</b>		<b>0.0516</b>	<b>0.0516</b>		<b>814.1660</b>	<b>814.1660</b>	<b>0.0156</b>	<b>0.0149</b>	<b>819.0042</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

Hayden Place - Los Angeles-South Coast County, Summer

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	5.6365	0.1180	0.2334	7.5000e-004		0.0102	0.0102		0.0102	0.0102	0.0000	148.6018	148.6018	3.5500e-003	2.7200e-003	149.5005
Unmitigated	5.6365	0.1180	0.2334	7.5000e-004		0.0102	0.0102		0.0102	0.0102	0.0000	148.6018	148.6018	3.5500e-003	2.7200e-003	149.5005

**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	0.6484					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.9627					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0136	0.1161	0.0494	7.4000e-004		9.3900e-003	9.3900e-003		9.3900e-003	9.3900e-003	0.0000	148.2353	148.2353	2.8400e-003	2.7200e-003	149.1162
Landscaping	0.0119	1.8700e-003	0.1840	1.0000e-005		8.2000e-004	8.2000e-004		8.2000e-004	8.2000e-004		0.3665	0.3665	7.1000e-004		0.3843
<b>Total</b>	<b>5.6365</b>	<b>0.1180</b>	<b>0.2334</b>	<b>7.5000e-004</b>		<b>0.0102</b>	<b>0.0102</b>		<b>0.0102</b>	<b>0.0102</b>	<b>0.0000</b>	<b>148.6018</b>	<b>148.6018</b>	<b>3.5500e-003</b>	<b>2.7200e-003</b>	<b>149.5005</b>

Hayden Place - Los Angeles-South Coast County, Summer

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

**6.2 Area by SubCategory**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.6484					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.9627					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0136	0.1161	0.0494	7.4000e-004		9.3900e-003	9.3900e-003		9.3900e-003	9.3900e-003	0.0000	148.2353	148.2353	2.8400e-003	2.7200e-003	149.1162
Landscaping	0.0119	1.8700e-003	0.1840	1.0000e-005		8.2000e-004	8.2000e-004		8.2000e-004	8.2000e-004		0.3665	0.3665	7.1000e-004		0.3843
<b>Total</b>	<b>5.6365</b>	<b>0.1180</b>	<b>0.2334</b>	<b>7.5000e-004</b>		<b>0.0102</b>	<b>0.0102</b>		<b>0.0102</b>	<b>0.0102</b>	<b>0.0000</b>	<b>148.6018</b>	<b>148.6018</b>	<b>3.5500e-003</b>	<b>2.7200e-003</b>	<b>149.5005</b>

**7.0 Water Detail**

**7.1 Mitigation Measures Water**



Hayden Place - Los Angeles-South Coast County, Summer

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

**8.0 Waste Detail**

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**8.1 Mitigation Measures Waste**

**9.0 Operational Offroad**

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

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**Fire Pumps and Emergency Generators**

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

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

Equipment Type	Number
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**11.0 Vegetation**

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Hayden Place - Los Angeles-South Coast County, Winter

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

**Hayden Place**

**Los Angeles-South Coast County, Winter**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	245.00	1000sqft	1.00	245,000.00	0
Enclosed Parking with Elevator	750.00	Space	1.00	310,000.00	0
City Park	0.83	Acre	0.68	36,334.00	0
User Defined Residential	1.00	Dwelling Unit	0.01	1.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	33
<b>Climate Zone</b>	11			<b>Operational Year</b>	2024
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MWhr)</b>	334.37	<b>CH4 Intensity (lb/MWhr)</b>	0.033	<b>N2O Intensity (lb/MWhr)</b>	0.004

**1.3 User Entered Comments & Non-Default Data**

Project Characteristics - Adjusted CO2e based off of Power Content Label

Land Use - See Construction Assumptions

Construction Phase - See Construction Assumptions

Off-road Equipment - See Construction Equipment

Off-road Equipment - See Construction Assumptions

Off-road Equipment - See Construction Assumptions

Off-road Equipment - See Construction Assumptions

Off-road Equipment - See Construction Assumptions

Off-road Equipment - See Construction Assumptions

Hayden Place - Los Angeles-South Coast County, Winter

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

Off-road Equipment - See Construction Assumptions

Off-road Equipment - See Construction Assumptions

Trips and VMT - On-road vehicles calculated on spreadsheet

Demolition -

Grading -

Energy Use - Added Lighting Intensity for City parking area

Water And Wastewater - Use Irrigation Calculation Information

Construction Off-road Equipment Mitigation - See Construction Assumptions

Architectural Coating - No Residential Uses

Vehicle Trips - No Residential Uses

Fleet Mix - No Residential Uses

Woodstoves - 2 BBQ, 4 Firepits,& 1 Fireplace

Area Coating - No Residential Uses

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Residential_Exterior	1.00	0.00
tblArchitecturalCoating	ConstArea_Residential_Interior	2.00	0.00
tblAreaCoating	Area_Residential_Exterior	1	0
tblAreaCoating	Area_Residential_Interior	2	0
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	15.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00

Hayden Place - Los Angeles-South Coast County, Winter

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

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	18.00	26.00
tblConstructionPhase	NumDays	230.00	236.00
tblConstructionPhase	NumDays	230.00	288.00
tblConstructionPhase	NumDays	20.00	26.00
tblConstructionPhase	NumDays	8.00	54.00
tblConstructionPhase	NumDays	8.00	16.00

Hayden Place - Los Angeles-South Coast County, Winter

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

tblConstructionPhase	NumDays	5.00	27.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblEnergyUse	LightingElect	0.00	0.35
tblFireplaces	NumberGas	0.85	7.00
tblFireplaces	NumberWood	0.05	0.00
tblFleetMix	HHD	8.0790e-003	0.00
tblFleetMix	LDA	0.54	0.50
tblFleetMix	LDT1	0.06	0.50
tblFleetMix	LDT2	0.19	0.00
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	6.2390e-003	0.00
tblFleetMix	MCY	0.02	0.00
tblFleetMix	MDV	0.13	0.00
tblFleetMix	MH	3.3520e-003	0.00
tblFleetMix	MHD	0.01	0.00
tblFleetMix	OBUS	9.2300e-004	0.00
tblFleetMix	SBUS	7.0200e-004	0.00
tblFleetMix	UBUS	6.0400e-004	0.00
tblGrading	MaterialExported	0.00	170,000.00
tblLandUse	LandUseSquareFeet	300,000.00	310,000.00
tblLandUse	LandUseSquareFeet	36,154.80	36,334.00
tblLandUse	LandUseSquareFeet	0.00	1.00

Hayden Place - Los Angeles-South Coast County, Winter

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

tblLandUse	LotAcreage	5.62	1.00
tblLandUse	LotAcreage	6.75	1.00
tblLandUse	LotAcreage	0.83	0.68
tblLandUse	LotAcreage	0.00	0.01
tblLandUse	Population	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblProjectCharacteristics	CO2IntensityFactor	390.98	334.37
tblTripsAndVMT	HaulingTripNumber	314.00	0.00
tblTripsAndVMT	HaulingTripNumber	21,250.00	0.00
tblTripsAndVMT	VendorTripNumber	94.00	0.00
tblTripsAndVMT	VendorTripNumber	94.00	0.00
tblTripsAndVMT	WorkerTripNumber	20.00	0.00
tblTripsAndVMT	WorkerTripNumber	13.00	0.00
tblTripsAndVMT	WorkerTripNumber	20.00	0.00
tblTripsAndVMT	WorkerTripNumber	20.00	0.00
tblTripsAndVMT	WorkerTripNumber	15.00	0.00
tblTripsAndVMT	WorkerTripNumber	217.00	0.00
tblTripsAndVMT	WorkerTripNumber	217.00	0.00
tblTripsAndVMT	WorkerTripNumber	43.00	0.00
tblVehicleTrips	HO_TL	8.70	0.00
tblVehicleTrips	HO_TTP	40.60	0.00
tblVehicleTrips	HS_TL	5.90	0.00
tblVehicleTrips	HS_TTP	19.20	0.00
tblVehicleTrips	HW_TL	14.70	0.00
tblVehicleTrips	HW_TTP	40.20	0.00

Hayden Place - Los Angeles-South Coast County, Winter

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

tblWater	OutdoorWaterUseRate	500,422.17	212,589.00
tblWoodstoves	NumberCatalytic	0.05	0.00
tblWoodstoves	NumberNoncatalytic	0.05	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

**2.0 Emissions Summary**

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Hayden Place - Los Angeles-South Coast County, Winter

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

**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	6.5429	59.3259	67.3523	0.1315	3.4986	2.8291	6.3276	0.5067	2.6483	3.1550	0.0000	12,633.55 64	12,633.55 64	3.4445	0.0000	12,719.66 80
2024	92.3811	23.2099	31.4219	0.0547	0.0000	0.8170	0.8170	0.0000	0.7616	0.7616	0.0000	5,257.119 6	5,257.119 6	1.5129	0.0000	5,294.941 5
<b>Maximum</b>	<b>92.3811</b>	<b>59.3259</b>	<b>67.3523</b>	<b>0.1315</b>	<b>3.4986</b>	<b>2.8291</b>	<b>6.3276</b>	<b>0.5067</b>	<b>2.6483</b>	<b>3.1550</b>	<b>0.0000</b>	<b>12,633.55 64</b>	<b>12,633.55 64</b>	<b>3.4445</b>	<b>0.0000</b>	<b>12,719.66 80</b>

**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	3.2380	64.5541	85.7769	0.1315	1.3645	3.4589	4.8234	0.1976	3.4589	3.6565	0.0000	12,633.55 64	12,633.55 64	3.4445	0.0000	12,719.66 80
2024	92.0601	28.7537	37.5383	0.0547	0.0000	1.8090	1.8090	0.0000	1.8079	1.8079	0.0000	5,257.119 6	5,257.119 6	1.5129	0.0000	5,294.941 5
<b>Maximum</b>	<b>92.0601</b>	<b>64.5541</b>	<b>85.7769</b>	<b>0.1315</b>	<b>1.3645</b>	<b>3.4589</b>	<b>4.8234</b>	<b>0.1976</b>	<b>3.4589</b>	<b>3.6565</b>	<b>0.0000</b>	<b>12,633.55 64</b>	<b>12,633.55 64</b>	<b>3.4445</b>	<b>0.0000</b>	<b>12,719.66 80</b>



## Hayden Place - Los Angeles-South Coast County, Winter

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	3.67	-13.05	-24.85	0.00	61.00	-44.48	7.17	61.00	-54.45	-39.52	0.00	0.00	0.00	0.00	0.00	0.00

Hayden Place - Los Angeles-South Coast County, Winter

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

**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	5.6365	0.1180	0.2334	7.5000e-004		0.0102	0.0102		0.0102	0.0102	0.0000	148.6018	148.6018	3.5500e-003	2.7200e-003	149.5005
Energy	0.0746	0.6785	0.5699	4.0700e-003		0.0516	0.0516		0.0516	0.0516		814.1660	814.1660	0.0156	0.0149	819.0042
Mobile	6.8601	7.5415	68.7660	0.1485	16.1956	0.1108	16.3064	4.3140	0.1029	4.4169		15,405.3723	15,405.3723	1.0692	0.6668	15,630.8220
<b>Total</b>	<b>12.5713</b>	<b>8.3379</b>	<b>69.5694</b>	<b>0.1534</b>	<b>16.1956</b>	<b>0.1726</b>	<b>16.3682</b>	<b>4.3140</b>	<b>0.1646</b>	<b>4.4787</b>	<b>0.0000</b>	<b>16,368.1401</b>	<b>16,368.1401</b>	<b>1.0884</b>	<b>0.6845</b>	<b>16,599.3266</b>

**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	5.6365	0.1180	0.2334	7.5000e-004		0.0102	0.0102		0.0102	0.0102	0.0000	148.6018	148.6018	3.5500e-003	2.7200e-003	149.5005
Energy	0.0746	0.6785	0.5699	4.0700e-003		0.0516	0.0516		0.0516	0.0516		814.1660	814.1660	0.0156	0.0149	819.0042
Mobile	6.8601	7.5415	68.7660	0.1485	16.1956	0.1108	16.3064	4.3140	0.1029	4.4169		15,405.3723	15,405.3723	1.0692	0.6668	15,630.8220
<b>Total</b>	<b>12.5713</b>	<b>8.3379</b>	<b>69.5694</b>	<b>0.1534</b>	<b>16.1956</b>	<b>0.1726</b>	<b>16.3682</b>	<b>4.3140</b>	<b>0.1646</b>	<b>4.4787</b>	<b>0.0000</b>	<b>16,368.1401</b>	<b>16,368.1401</b>	<b>1.0884</b>	<b>0.6845</b>	<b>16,599.3266</b>

Hayden Place - Los Angeles-South Coast County, Winter

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

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

**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	4/1/2023	5/1/2023	6	26	
2	Site Preparation	Site Preparation	5/1/2023	5/31/2023	6	27	
3	Grading	Grading	5/1/2023	7/1/2023	6	54	
4	Drainage/Utilities/Trenching	Trenching	5/1/2023	8/15/2023	6	92	
5	Foundations/Concrete Pour	Grading	8/15/2023	9/1/2023	6	16	
6	Exterior Construction	Building Construction	9/1/2023	6/1/2024	6	236	
7	Interior Construction	Building Construction	10/1/2023	9/1/2024	6	288	
8	Paving	Architectural Coating	9/1/2024	10/1/2024	6	26	

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 27**

**Acres of Paving: 1**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 369,000; Non-Residential Outdoor: 123,000; Striped Parking Area: 18,600 (Architectural Coating – sqft)**

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Air Compressors	1	8.00	78	0.48
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Crushing/Proc. Equipment	1	8.00	85	0.78

Hayden Place - Los Angeles-South Coast County, Winter

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

Demolition	Excavators	1	8.00	158	0.38
Demolition	Other Construction Equipment	2	8.00	172	0.42
Demolition	Rubber Tired Loaders	1	8.00	203	0.36
Demolition	Sweepers/Scrubbers	1	8.00	64	0.46
Site Preparation	Crushing/Proc. Equipment	1	8.00	85	0.78
Site Preparation	Other Construction Equipment	1	8.00	172	0.42
Site Preparation	Rubber Tired Loaders	1	8.00	203	0.36
Site Preparation	Sweepers/Scrubbers	1	8.00	64	0.46
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Bore/Drill Rigs	2	8.00	221	0.50
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Plate Compactors	1	8.00	8	0.43
Grading	Rubber Tired Loaders	1	8.00	203	0.36
Grading	Sweepers/Scrubbers	1	8.00	64	0.46
Drainage/Utilities/Trenching	Cement and Mortar Mixers	2	8.00	9	0.56
Drainage/Utilities/Trenching	Skid Steer Loaders	2	8.00	65	0.37
Drainage/Utilities/Trenching	Sweepers/Scrubbers	1	8.00	64	0.46
Drainage/Utilities/Trenching	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Drainage/Utilities/Trenching	Trenchers	1	8.00	78	0.50
Foundations/Concrete Pour	Cranes	1	8.00	231	0.29
Foundations/Concrete Pour	Dumpers/Tenders	1	8.00	16	0.38
Foundations/Concrete Pour	Generator Sets	1	8.00	84	0.74
Foundations/Concrete Pour	Rough Terrain Forklifts	1	8.00	100	0.40
Foundations/Concrete Pour	Skid Steer Loaders	1	8.00	65	0.37
Foundations/Concrete Pour	Sweepers/Scrubbers	1	8.00	64	0.46
Exterior Construction	Cranes	1	8.00	231	0.29
Exterior Construction	Generator Sets	1	8.00	84	0.74
Exterior Construction	Rough Terrain Forklifts	1	8.00	100	0.40

Hayden Place - Los Angeles-South Coast County, Winter

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

Exterior Construction	Skid Steer Loaders	1	8.00	65	0.37
Exterior Construction	Sweepers/Scrubbers	1	8.00	64	0.46
Interior Construction	Aerial Lifts	15	8.00	63	0.31
Interior Construction	Cement and Mortar Mixers	1	8.00	9	0.56
Interior Construction	Cranes	1	8.00	231	0.29
Interior Construction	Sweepers/Scrubbers	1	8.00	64	0.46
Paving	Rough Terrain Forklifts	1	8.00	100	0.40
Paving	Sweepers/Scrubbers	1	8.00	64	0.46

**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	8	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	5	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Drainage/Utilities/Trenching	8	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Foundations/Concrete Pour	6	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Exterior Construction	5	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Interior Construction	18	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	2	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Hayden Place - Los Angeles-South Coast County, Winter

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

**3.2 Demolition - 2023**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive 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					2.6123	0.0000	2.6123	0.3955	0.0000	0.3955			0.0000			0.0000
Off-Road	2.3775	20.0904	25.0900	0.0436		1.0085	1.0085		0.9580	0.9580		4,180.8264	4,180.8264	0.9156		4,203.7164
<b>Total</b>	<b>2.3775</b>	<b>20.0904</b>	<b>25.0900</b>	<b>0.0436</b>	<b>2.6123</b>	<b>1.0085</b>	<b>3.6208</b>	<b>0.3955</b>	<b>0.9580</b>	<b>1.3535</b>		<b>4,180.8264</b>	<b>4,180.8264</b>	<b>0.9156</b>		<b>4,203.7164</b>

**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

Hayden Place - Los Angeles-South Coast County, Winter

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

**3.2 Demolition - 2023**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.0188	0.0000	1.0188	0.1543	0.0000	0.1543			0.0000			0.0000
Off-Road	0.9945	20.6522	29.2470	0.0436		1.1686	1.1686		1.1686	1.1686	0.0000	4,180.826 4	4,180.826 4	0.9156		4,203.716 4
<b>Total</b>	<b>0.9945</b>	<b>20.6522</b>	<b>29.2470</b>	<b>0.0436</b>	<b>1.0188</b>	<b>1.1686</b>	<b>2.1875</b>	<b>0.1543</b>	<b>1.1686</b>	<b>1.3229</b>	<b>0.0000</b>	<b>4,180.826 4</b>	<b>4,180.826 4</b>	<b>0.9156</b>		<b>4,203.716 4</b>

**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

Hayden Place - Los Angeles-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule 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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	1.4025	12.3181	13.9888	0.0251		0.6068	0.6068		0.5706	0.5706		2,416.1058	2,416.1058	0.6063		2,431.2621
<b>Total</b>	<b>1.4025</b>	<b>12.3181</b>	<b>13.9888</b>	<b>0.0251</b>	<b>0.0000</b>	<b>0.6068</b>	<b>0.6068</b>	<b>0.0000</b>	<b>0.5706</b>	<b>0.5706</b>		<b>2,416.1058</b>	<b>2,416.1058</b>	<b>0.6063</b>		<b>2,431.2621</b>

**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>



Hayden Place - Los Angeles-South Coast County, Winter

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

**3.3 Site Preparation - 2023**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.5862	12.3072	16.6551	0.0251		0.7019	0.7019		0.7019	0.7019	0.0000	2,416.1058	2,416.1058	0.6063		2,431.2621
<b>Total</b>	<b>0.5862</b>	<b>12.3072</b>	<b>16.6551</b>	<b>0.0251</b>	<b>0.0000</b>	<b>0.7019</b>	<b>0.7019</b>	<b>0.0000</b>	<b>0.7019</b>	<b>0.7019</b>	<b>0.0000</b>	<b>2,416.1058</b>	<b>2,416.1058</b>	<b>0.6063</b>		<b>2,431.2621</b>

**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

Hayden Place - Los Angeles-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule 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					0.8863	0.0000	0.8863	0.1112	0.0000	0.1112			0.0000			0.0000
Off-Road	1.6837	16.4413	15.9127	0.0452		0.6419	0.6419		0.5913	0.5913		4,358.0899	4,358.0899	1.4019		4,393.1380
<b>Total</b>	<b>1.6837</b>	<b>16.4413</b>	<b>15.9127</b>	<b>0.0452</b>	<b>0.8863</b>	<b>0.6419</b>	<b>1.5282</b>	<b>0.1112</b>	<b>0.5913</b>	<b>0.7025</b>		<b>4,358.0899</b>	<b>4,358.0899</b>	<b>1.4019</b>		<b>4,393.1380</b>

**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

Hayden Place - Los Angeles-South Coast County, Winter

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

**3.4 Grading - 2023**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.3457	0.0000	0.3457	0.0434	0.0000	0.0434			0.0000			0.0000
Off-Road	1.1412	21.7577	26.9688	0.0452		0.9221	0.9221		0.9221	0.9221	0.0000	4,358.0899	4,358.0899	1.4019		4,393.1379
<b>Total</b>	<b>1.1412</b>	<b>21.7577</b>	<b>26.9688</b>	<b>0.0452</b>	<b>0.3457</b>	<b>0.9221</b>	<b>1.2677</b>	<b>0.0434</b>	<b>0.9221</b>	<b>0.9654</b>	<b>0.0000</b>	<b>4,358.0899</b>	<b>4,358.0899</b>	<b>1.4019</b>		<b>4,393.1379</b>

**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

Hayden Place - Los Angeles-South Coast County, Winter

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

**3.5 Drainage/Utilities/Trenching - 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	1.0791	10.4761	12.3608	0.0177		0.5719	0.5719		0.5284	0.5284		1,678.5344	1,678.5344	0.5207		1,691.5515
<b>Total</b>	<b>1.0791</b>	<b>10.4761</b>	<b>12.3608</b>	<b>0.0177</b>		<b>0.5719</b>	<b>0.5719</b>		<b>0.5284</b>	<b>0.5284</b>		<b>1,678.5344</b>	<b>1,678.5344</b>	<b>0.5207</b>		<b>1,691.5515</b>

**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

Hayden Place - Los Angeles-South Coast County, Winter

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

**3.5 Drainage/Utilities/Trenching - 2023**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5161	9.8370	12.9059	0.0177		0.6663	0.6663		0.6663	0.6663	0.0000	1,678.5343	1,678.5343	0.5207		1,691.5515
<b>Total</b>	<b>0.5161</b>	<b>9.8370</b>	<b>12.9059</b>	<b>0.0177</b>		<b>0.6663</b>	<b>0.6663</b>		<b>0.6663</b>	<b>0.6663</b>	<b>0.0000</b>	<b>1,678.5343</b>	<b>1,678.5343</b>	<b>0.5207</b>		<b>1,691.5515</b>

**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

Hayden Place - Los Angeles-South Coast County, Winter

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

**3.6 Foundations/Concrete Pour - 2023**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	1.0836	10.9656	11.3458	0.0212		0.4880	0.4880		0.4606	0.4606		2,023.260 2	2,023.260 2	0.4671		2,034.937 7
<b>Total</b>	<b>1.0836</b>	<b>10.9656</b>	<b>11.3458</b>	<b>0.0212</b>	<b>0.0000</b>	<b>0.4880</b>	<b>0.4880</b>	<b>0.0000</b>	<b>0.4606</b>	<b>0.4606</b>		<b>2,023.260 2</b>	<b>2,023.260 2</b>	<b>0.4671</b>		<b>2,034.937 7</b>

**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

Hayden Place - Los Angeles-South Coast County, Winter

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

**3.6 Foundations/Concrete Pour - 2023**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.5518	10.5460	13.3701	0.0212		0.6177	0.6177		0.6164	0.6164	0.0000	2,023.260 2	2,023.260 2	0.4671		2,034.937 7
<b>Total</b>	<b>0.5518</b>	<b>10.5460</b>	<b>13.3701</b>	<b>0.0212</b>	<b>0.0000</b>	<b>0.6177</b>	<b>0.6177</b>	<b>0.0000</b>	<b>0.6164</b>	<b>0.6164</b>	<b>0.0000</b>	<b>2,023.260 2</b>	<b>2,023.260 2</b>	<b>0.4671</b>		<b>2,034.937 7</b>

**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

Hayden Place - Los Angeles-South Coast County, Winter

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

**3.7 Exterior 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	1.0102	10.5010	11.0950	0.0204		0.4706	0.4706		0.4432	0.4432		1,962.3199	1,962.3199	0.4606		1,973.8339
<b>Total</b>	<b>1.0102</b>	<b>10.5010</b>	<b>11.0950</b>	<b>0.0204</b>		<b>0.4706</b>	<b>0.4706</b>		<b>0.4432</b>	<b>0.4432</b>		<b>1,962.3199</b>	<b>1,962.3199</b>	<b>0.4606</b>		<b>1,973.8339</b>

**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>



Hayden Place - Los Angeles-South Coast County, Winter

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

**3.7 Exterior Construction - 2023**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4784	10.0815	13.1193	0.0204		0.6003	0.6003		0.5991	0.5991	0.0000	1,962.3199	1,962.3199	0.4606		1,973.8339
<b>Total</b>	<b>0.4784</b>	<b>10.0815</b>	<b>13.1193</b>	<b>0.0204</b>		<b>0.6003</b>	<b>0.6003</b>		<b>0.5991</b>	<b>0.5991</b>	<b>0.0000</b>	<b>1,962.3199</b>	<b>1,962.3199</b>	<b>0.4606</b>		<b>1,973.8339</b>

**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

Hayden Place - Los Angeles-South Coast County, Winter

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

**3.7 Exterior 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	0.9539	9.8344	11.0296	0.0204		0.4221	0.4221		0.3972	0.3972		1,962.3218	1,962.3218	0.4584		1,973.7810
<b>Total</b>	<b>0.9539</b>	<b>9.8344</b>	<b>11.0296</b>	<b>0.0204</b>		<b>0.4221</b>	<b>0.4221</b>		<b>0.3972</b>	<b>0.3972</b>		<b>1,962.3218</b>	<b>1,962.3218</b>	<b>0.4584</b>		<b>1,973.7810</b>

**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

Hayden Place - Los Angeles-South Coast County, Winter

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

**3.7 Exterior Construction - 2024**

**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	0.4772	10.0648	13.1199	0.0204		0.5990	0.5990		0.5979	0.5979	0.0000	1,962.3218	1,962.3218	0.4584		1,973.7810
<b>Total</b>	<b>0.4772</b>	<b>10.0648</b>	<b>13.1199</b>	<b>0.0204</b>		<b>0.5990</b>	<b>0.5990</b>		<b>0.5979</b>	<b>0.5979</b>	<b>0.0000</b>	<b>1,962.3218</b>	<b>1,962.3218</b>	<b>0.4584</b>		<b>1,973.7810</b>

**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

Hayden Place - Los Angeles-South Coast County, Winter

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

**3.8 Interior 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	1.1114	13.8882	20.4415	0.0342		0.4206	0.4206		0.3881	0.3881		3,294.8097	3,294.8097	1.0545		3,321.1726
<b>Total</b>	<b>1.1114</b>	<b>13.8882</b>	<b>20.4415</b>	<b>0.0342</b>		<b>0.4206</b>	<b>0.4206</b>		<b>0.3881</b>	<b>0.3881</b>		<b>3,294.8097</b>	<b>3,294.8097</b>	<b>1.0545</b>		<b>3,321.1726</b>

**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

Hayden Place - Los Angeles-South Coast County, Winter

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

**3.8 Interior Construction - 2023**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8829	18.6889	24.4184	0.0342		1.2100	1.2100		1.2100	1.2100	0.0000	3,294.8097	3,294.8097	1.0545		3,321.1726
<b>Total</b>	<b>0.8829</b>	<b>18.6889</b>	<b>24.4184</b>	<b>0.0342</b>		<b>1.2100</b>	<b>1.2100</b>		<b>1.2100</b>	<b>1.2100</b>	<b>0.0000</b>	<b>3,294.8097</b>	<b>3,294.8097</b>	<b>1.0545</b>		<b>3,321.1726</b>

**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

Hayden Place - Los Angeles-South Coast County, Winter

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

**3.8 Interior 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	1.0820	13.3755	20.3923	0.0342		0.3949	0.3949		0.3644	0.3644		3,294.7978	3,294.7978	1.0545		3,321.1606
<b>Total</b>	<b>1.0820</b>	<b>13.3755</b>	<b>20.3923</b>	<b>0.0342</b>		<b>0.3949</b>	<b>0.3949</b>		<b>0.3644</b>	<b>0.3644</b>		<b>3,294.7978</b>	<b>3,294.7978</b>	<b>1.0545</b>		<b>3,321.1606</b>

**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

Hayden Place - Los Angeles-South Coast County, Winter

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

**3.8 Interior Construction - 2024**

**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	0.8829	18.6889	24.4184	0.0342		1.2100	1.2100		1.2100	1.2100	0.0000	3,294.7978	3,294.7978	1.0545		3,321.1606
<b>Total</b>	<b>0.8829</b>	<b>18.6889</b>	<b>24.4184</b>	<b>0.0342</b>		<b>1.2100</b>	<b>1.2100</b>		<b>1.2100</b>	<b>1.2100</b>	<b>0.0000</b>	<b>3,294.7978</b>	<b>3,294.7978</b>	<b>1.0545</b>		<b>3,321.1606</b>

**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

Hayden Place - Los Angeles-South Coast County, Winter

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

**3.9 Paving - 2024**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	91.0243					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2748	2.9591	4.2065	5.9900e-003		0.1390	0.1390		0.1279	0.1279		579.9126	579.9126	0.1876		584.6015
<b>Total</b>	<b>91.2991</b>	<b>2.9591</b>	<b>4.2065</b>	<b>5.9900e-003</b>		<b>0.1390</b>	<b>0.1390</b>		<b>0.1279</b>	<b>0.1279</b>		<b>579.9126</b>	<b>579.9126</b>	<b>0.1876</b>		<b>584.6015</b>

**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>



Hayden Place - Los Angeles-South Coast County, Winter

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

**3.9 Paving - 2024**

**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	91.0243					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1530	3.1576	4.4222	5.9900e-003		0.2031	0.2031		0.2020	0.2020	0.0000	579.9126	579.9126	0.1876		584.6015
<b>Total</b>	<b>91.1773</b>	<b>3.1576</b>	<b>4.4222</b>	<b>5.9900e-003</b>		<b>0.2031</b>	<b>0.2031</b>		<b>0.2020</b>	<b>0.2020</b>	<b>0.0000</b>	<b>579.9126</b>	<b>579.9126</b>	<b>0.1876</b>		<b>584.6015</b>

**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

Hayden Place - Los Angeles-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule 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	6.8601	7.5415	68.7660	0.1485	16.1956	0.1108	16.3064	4.3140	0.1029	4.4169		15,405.37 23	15,405.37 23	1.0692	0.6668	15,630.82 20
Unmitigated	6.8601	7.5415	68.7660	0.1485	16.1956	0.1108	16.3064	4.3140	0.1029	4.4169		15,405.37 23	15,405.37 23	1.0692	0.6668	15,630.82 20

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.65	1.63	1.82	2,747	2,747
Enclosed Parking with Elevator	0.00	0.00	0.00		
General Office Building	2,386.30	541.45	171.50	5,819,086	5,819,086
User Defined Residential	0.00	0.00	0.00		
<b>Total</b>	<b>2,386.95</b>	<b>543.08</b>	<b>173.32</b>	<b>5,821,833</b>	<b>5,821,833</b>

**4.3 Trip Type Information**

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4

Hayden Place - Los Angeles-South Coast County, Winter

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

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
User Defined Residential	0.00	0.00	0.00	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
City Park	0.542464	0.063735	0.188241	0.126899	0.023249	0.006239	0.010717	0.008079	0.000923	0.000604	0.024795	0.000702	0.003352
Enclosed Parking with Elevator	0.542464	0.063735	0.188241	0.126899	0.023249	0.006239	0.010717	0.008079	0.000923	0.000604	0.024795	0.000702	0.003352
General Office Building	0.542464	0.063735	0.188241	0.126899	0.023249	0.006239	0.010717	0.008079	0.000923	0.000604	0.024795	0.000702	0.003352
User Defined Residential	0.500000	0.500000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day										lb/day					
NaturalGas Mitigated	0.0746	0.6785	0.5699	4.0700e-003		0.0516	0.0516		0.0516	0.0516		814.1660	814.1660	0.0156	0.0149	819.0042
NaturalGas Unmitigated	0.0746	0.6785	0.5699	4.0700e-003		0.0516	0.0516		0.0516	0.0516		814.1660	814.1660	0.0156	0.0149	819.0042

Hayden Place - Los Angeles-South Coast County, Winter

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

**5.2 Energy by Land Use - NaturalGas**

**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
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
General Office Building	6920.41	0.0746	0.6785	0.5699	4.0700e-003		0.0516	0.0516		0.0516	0.0516		814.1660	814.1660	0.0156	0.0149	819.0042
User Defined Residential	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
<b>Total</b>		<b>0.0746</b>	<b>0.6785</b>	<b>0.5699</b>	<b>4.0700e-003</b>		<b>0.0516</b>	<b>0.0516</b>		<b>0.0516</b>	<b>0.0516</b>		<b>814.1660</b>	<b>814.1660</b>	<b>0.0156</b>	<b>0.0149</b>	<b>819.0042</b>

Hayden Place - Los Angeles-South Coast County, Winter

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

**5.2 Energy by Land Use - NaturalGas**

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
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
General Office Building	6.92041	0.0746	0.6785	0.5699	4.0700e-003		0.0516	0.0516		0.0516	0.0516		814.1660	814.1660	0.0156	0.0149	819.0042
User Defined Residential	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
<b>Total</b>		<b>0.0746</b>	<b>0.6785</b>	<b>0.5699</b>	<b>4.0700e-003</b>		<b>0.0516</b>	<b>0.0516</b>		<b>0.0516</b>	<b>0.0516</b>		<b>814.1660</b>	<b>814.1660</b>	<b>0.0156</b>	<b>0.0149</b>	<b>819.0042</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

Hayden Place - Los Angeles-South Coast County, Winter

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	5.6365	0.1180	0.2334	7.5000e-004		0.0102	0.0102		0.0102	0.0102	0.0000	148.6018	148.6018	3.5500e-003	2.7200e-003	149.5005
Unmitigated	5.6365	0.1180	0.2334	7.5000e-004		0.0102	0.0102		0.0102	0.0102	0.0000	148.6018	148.6018	3.5500e-003	2.7200e-003	149.5005

**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	0.6484					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.9627					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0136	0.1161	0.0494	7.4000e-004		9.3900e-003	9.3900e-003		9.3900e-003	9.3900e-003	0.0000	148.2353	148.2353	2.8400e-003	2.7200e-003	149.1162
Landscaping	0.0119	1.8700e-003	0.1840	1.0000e-005		8.2000e-004	8.2000e-004		8.2000e-004	8.2000e-004		0.3665	0.3665	7.1000e-004		0.3843
<b>Total</b>	<b>5.6365</b>	<b>0.1180</b>	<b>0.2334</b>	<b>7.5000e-004</b>		<b>0.0102</b>	<b>0.0102</b>		<b>0.0102</b>	<b>0.0102</b>	<b>0.0000</b>	<b>148.6018</b>	<b>148.6018</b>	<b>3.5500e-003</b>	<b>2.7200e-003</b>	<b>149.5005</b>

Hayden Place - Los Angeles-South Coast County, Winter

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

**6.2 Area by SubCategory**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.6484					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.9627					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0136	0.1161	0.0494	7.4000e-004		9.3900e-003	9.3900e-003		9.3900e-003	9.3900e-003	0.0000	148.2353	148.2353	2.8400e-003	2.7200e-003	149.1162
Landscaping	0.0119	1.8700e-003	0.1840	1.0000e-005		8.2000e-004	8.2000e-004		8.2000e-004	8.2000e-004		0.3665	0.3665	7.1000e-004		0.3843
<b>Total</b>	<b>5.6365</b>	<b>0.1180</b>	<b>0.2334</b>	<b>7.5000e-004</b>		<b>0.0102</b>	<b>0.0102</b>		<b>0.0102</b>	<b>0.0102</b>	<b>0.0000</b>	<b>148.6018</b>	<b>148.6018</b>	<b>3.5500e-003</b>	<b>2.7200e-003</b>	<b>149.5005</b>

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

Hayden Place - Los Angeles-South Coast County, Winter

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

**8.0 Waste Detail**

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**8.1 Mitigation Measures Waste**

**9.0 Operational Offroad**

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

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**Fire Pumps and Emergency Generators**

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

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

Equipment Type	Number
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**11.0 Vegetation**

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