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# **Appendix A**

## Air Quality Technical Report



# **AIR QUALITY ASSESSMENT**

**Jefferson Oceanside Apartments  
Multi-Family Mixed Use Development**

**City of Oceanside, CA**

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## **LIST OF COMMON ACRONYMS**

Air Quality Impact Assessments (AQIA)  
Assembly Bill 32 (AB32)  
Reactive Organic Gas (ROG)  
California Environmental Quality Act (CEQA)  
Cubic Yards (CY)  
Carbon Dioxide (CO<sub>2</sub>)  
Methane (CH<sub>4</sub>)  
Nitrous Oxide (N<sub>2</sub>O)  
Hydrogen Sulfide (H<sub>2</sub>S)  
Diesel Particulate Matter (DPM)  
Level of Service (LOS)  
San Diego Air Basin (SDAB)  
Specific Plan Area (SPA)  
Hazardous Air Pollutants (HAPs)  
Toxic Air Contaminants (TACs)  
Environmental Protection Agency (EPA)  
California Air Resource Board (CARB)  
San Diego Air Pollution Control District (SDAPCD)  
Vehicle Miles Traveled (VMT)  
National ambient air quality standards (NAAQS)  
California Ambient Air Quality Standards (CAAQS)  
Regional Air Quality Strategy (RAQS)  
State Implementation Plan (SIP)

## **EXECUTIVE SUMMARY**

This air quality assessment has been completed to determine the air quality impacts associated with the development of the proposed Jefferson Oceanside Apartment project. The site is located just south of the Crouch light rail station or south of the intersection Skylark Drive and Crouch Street in Oceanside, in central coastal San Diego County. The community would be situated on an approximately 19-acre project site and would consist of 295 apartment units and 3,000 Square Feet (SF) of retail space. In addition, the project includes on- and off-site utility improvements, S. Oceanside Boulevard roadway extension and Crouch Street improvements. All construction phases (i.e., grading through construction) of the proposed project are anticipated to be complete sometime in late 2025 and full buildout operations are expected in 2026.

Project design features (PDFs) have been included in this project. The applicant has agreed to implement all PDFs, which will be included in the project's Conditions of Approval. These PDFs include the following:

1. The project would install low flow water fixtures in all residential units and retail area.
2. All lighting within the project will be designed using LED technology for both indoor and outdoor areas.
3. The project would provide separate waste containers to allow for simpler material separations, or the project would pay for a waste collection service that recycles the materials in accordance with AB 341 to achieve a 75% waste diversion.
4. The project would not install hearth (fireplace) options in residential units.
5. The project would install water efficient/drought tolerant and/or native landscape, use smart evapotranspiration controllers, would use reclaimed water on non-agricultural project landscaping areas and would limit conventional turf.
6. The project is located within walking distance to Crouch Street Rail station and is within walking distance to retail and commercial centers areas.
7. The project would comply with ENERGYSTAR appliance requirements and would meet ENERGYSTAR for Homes.
8. The project would be required to utilize Tier 3 construction Equipment with Diesel Particulate Filters (DPF) attached or equivalent.
9. The project would install high-efficiency HVAC systems.
10. The project would install 413 kilowatts (kW) of solar within the development.
11. The project would meet all Electric Vehicle (EV) Charging Station requirements and will install 35 EV charging stations

PDFs 1-8 above have been quantified in this analysis, while PDFs 9-11 are not specifically analyzed quantitatively in this analysis. As a result, the proposed project emissions are conservative.

During construction of the proposed project, fugitive dust emissions will be expected during grading and construction operations. Based upon modeling results, these activities would generate less than significant air quality impacts when compared to screening thresholds established by the San Diego Air Pollution Control District (SDAPCD). Therefore, the project would not require mitigation. Also, based on the project size, emissions and relative location to nearby cumulative projects, the proposed project would generate less than significant cumulative construction impacts.

As part of the City's Housing Element the Community Commercial use allows for a density of up to 29 Units per gross acre and estimates that the project could be developed with as many as 305 units (City of Oceanside, 2013). The project site has been designed to have a density of 22.9 units per acre with some retail. Since the proposed project would construct only 295 of the projected 305 units within the housing element, the project would be consistent with RAQS and the SIP. These updated projections will accurately reflect anticipated growth due to the Housing Element.

A diesel particulate matter (DPM) screening-level health risk assessment for construction was conducted to determine the project's potential for generating health risk impacts to nearby sensitive receptors during short-term construction activities. The result of the health risk assessment indicates that the proposed project would not increase diesel particulates to a level which would exceed the 10 in one million cancer risk threshold. The project does not contain any industrial uses that have the potential to create a health risk at adjacent land uses. Therefore, no operational health risks are anticipated and no analysis was required. Given this, impacts to health risks would be less than significant.

A cursory review of potential offsite health risk sources to the project site was conducted and based on that review no significant sources exist. The nearby Crouch Street light rail station was considered as a potential source however since the light rail station consisted of much smaller trains which stopped at the site as well as two weekly pass by freight trips was ruled out as a major health risk since the light rail station and two freight pass by trips does not classify as a rail yard. With this, the project site would not meet California Air Resources Board's (CARB) locational guidance for preparation of such an analysis. Given this, impacts to health risks would be less than significant.

Air Quality emissions from the operations of the proposed project would not exceed significance thresholds established by the SDAPCD, and therefore would generate less than significant air quality impacts under CEQA.

The proposed project has been designed to conform to the Housing Element of the City's General Plan. Also, the City has updated SANDAG with growth projections approved by the City within the

Housing Element. Since the project has been designed in accordance with growth projections identified within the Housing Element, and since direct construction and operational impacts are not expected, the project would be consistent with San Diego's Regional Air Quality Strategy (RAQS) and would also conform to the State Implement Plan (SIP).

Odors would be potentially generated from vehicles and equipment exhaust emissions during construction of the proposed project. Potential odors produced during construction would be attributable to concentrations of unburned hydrocarbons from tailpipes of construction equipment. Such odors would disperse rapidly from the project site and generally occur at magnitudes that would not affect substantial numbers of people due to the project's location and distance from any residential receptors and due to prevailing winds which blow from west to east towards open space/undeveloped lands. Therefore, impacts associated with odors during construction would be less than significant.

Generally, land uses and industrial operations associated with odor complaints include agricultural uses, wastewater treatment plants, food-processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding. The proposed project would not specifically fit within these general categories and would be expected to generate less than significant odor impacts.

The proposed commercial/retail use may however contain a fast-food restaurant without a drive through. Odor impacts from restaurants are possible though mitigated through the use of exhaust filtration systems which are fairly typical. Should a fast-food restaurant utilize the commercial/retail space proposed, exhaust filtration systems will be required and the restaurant applicant would be required to demonstrate compliance.

## **1.0 INTRODUCTION**

### **1.1 Purpose of this Study**

The purpose of this Air Quality Assessment is to determine potential significant air quality impacts (if any) that may be created by either construction or operational emissions (short term or long term) from the proposed project. Should impacts be determined, the intent of this study would be to recommend suitable mitigation measures to reduce impacts to the extent feasible.

### **1.2 Project Location**

The project site is located just south of the Crouch Light Rail Station or south of the intersection Skylark Drive and Crouch Street in Oceanside, in central coastal San Diego County. An existing single-family residential development lies south of the project site. A commercial office park is located west of the development and undeveloped land exists to the east.

The site is within walking/biking distance to Crouch Street Station (<0.1 miles), also retail shopping and food stores are located across Oceanside Boulevard a short walk north along Crouch Street. A general Project vicinity map is shown in Figure 1-A of this report.

### **1.3 Project Description**

The proposed project includes 295 dwelling units of residential apartments and 3,000 square feet of specialty retail, including potential restaurant uses. The proposed site development plan is shown on Figure 1-B. The site is currently zoned Community Commercial (CC) and a conditional use permit and Mixed Use Development Plan are required to allow for up to 29 units per acre. The project site is approximately 19 acres; however, extreme slopes exist to the south of the project site. Based on this, the buildable area onsite is only 12.87 acres; therefore, the net density is approximately 22.9 units per acre.

Access to the project site will be along the future roadway of South Oceanside Boulevard which connects to the existing roads of Crouch Street and Union Plaza Court. The project includes on- and off-site utility improvements, S. Oceanside Boulevard roadway extension and Crouch Street roadway improvements.

It is expected that the proposed project would begin construction in 2023 and be completed roughly two years later with full occupancy and operations expected in 2026. During the grading phase of the Project, it is expected that an export of up to 10,100 cubic yards (CY) will be required.

As part of the City's Housing Element the Community Commercial use allows for a density of up to 29 Units per gross acre and estimates that the project could be developed with as many as 305 units (City of Oceanside, 2013). As mentioned above, the project site has been designed to have a density of 22.9 units per acre with some retail. Since the proposed project would construct only 295 of the projected 305 units within the housing element, the project would be consistent with RAQS and the SIP. These updated projections will accurately reflect anticipated growth due to the Housing Element.

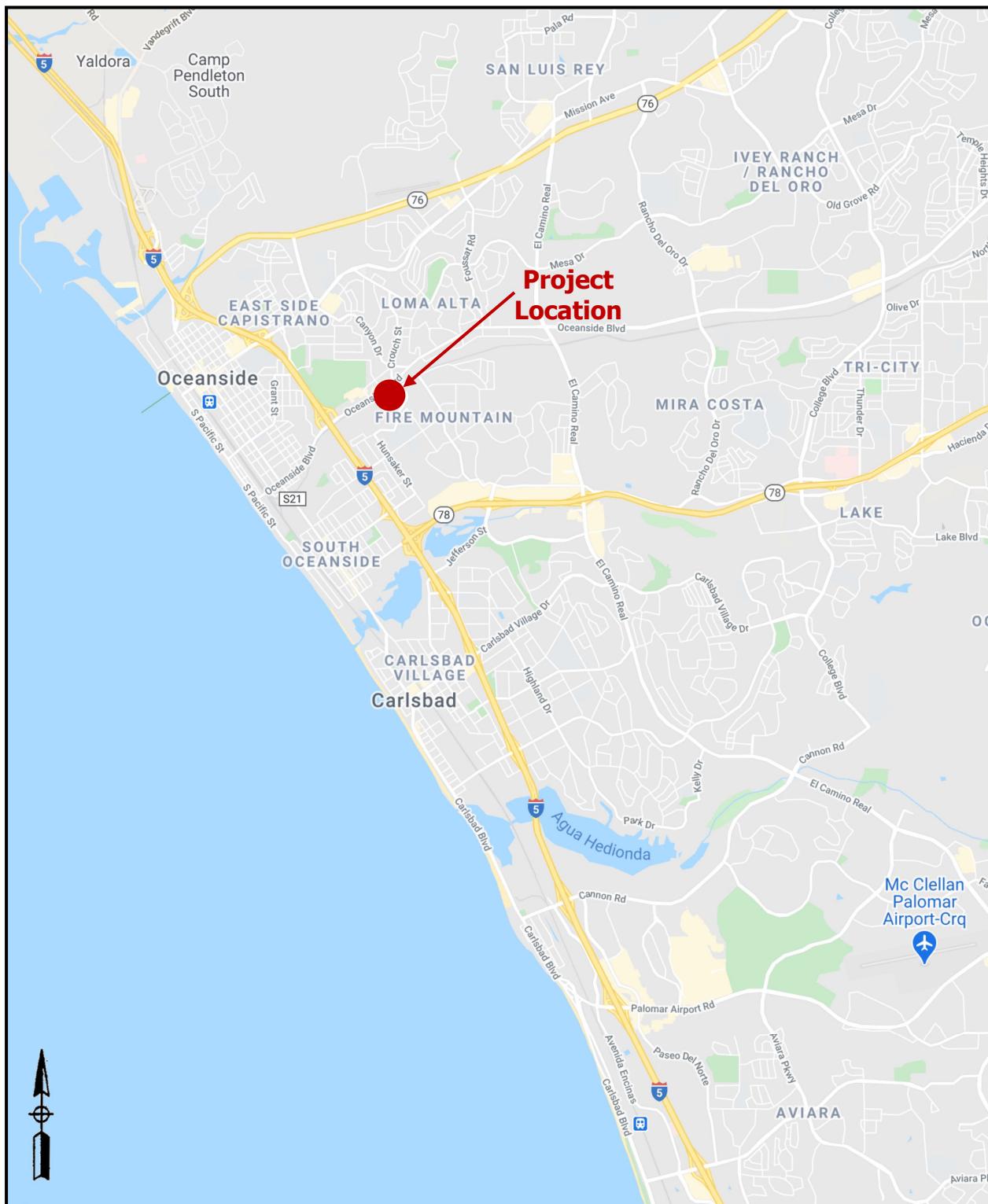
#### 1.4 Project Design Features

The proposed project would implement Project Design Features (PDFs) specifically chosen to reduce both greenhouse gas and air quality emissions. These PDFs would promote sustainability through site design that would conserve energy, water, open space, and other natural resources, and would become specific Conditions of Approval (COA) by the City of Oceanside:

1. The project would install low flow water fixtures in all residential units and retail area.
2. All lighting within the project will be designed using LED technology for both indoor and outdoor areas.
3. The project would provide separate waste containers to allow for simpler material separations, or the project would pay for a waste collection service that recycles the materials in accordance with AB 341 to achieve a 75% waste diversion.
4. The project would not install hearth (fireplace) options in residential units.
5. The project would install water efficient/drought tolerant and/or native landscape, use smart evapotranspiration controllers, would use reclaimed water on non-agricultural project landscaping areas and would limit conventional turf.
6. The project is located within walking distance to Crouch Street Rail station and is within walking distance to retail and commercial centers areas.
7. The project would comply with ENERGYSTAR appliance requirements and would meet ENERGYSTAR for Homes.
8. The project would be required to utilize Tier 3 construction Equipment with Diesel Particulate Filters (DPF) attached or equivalent.
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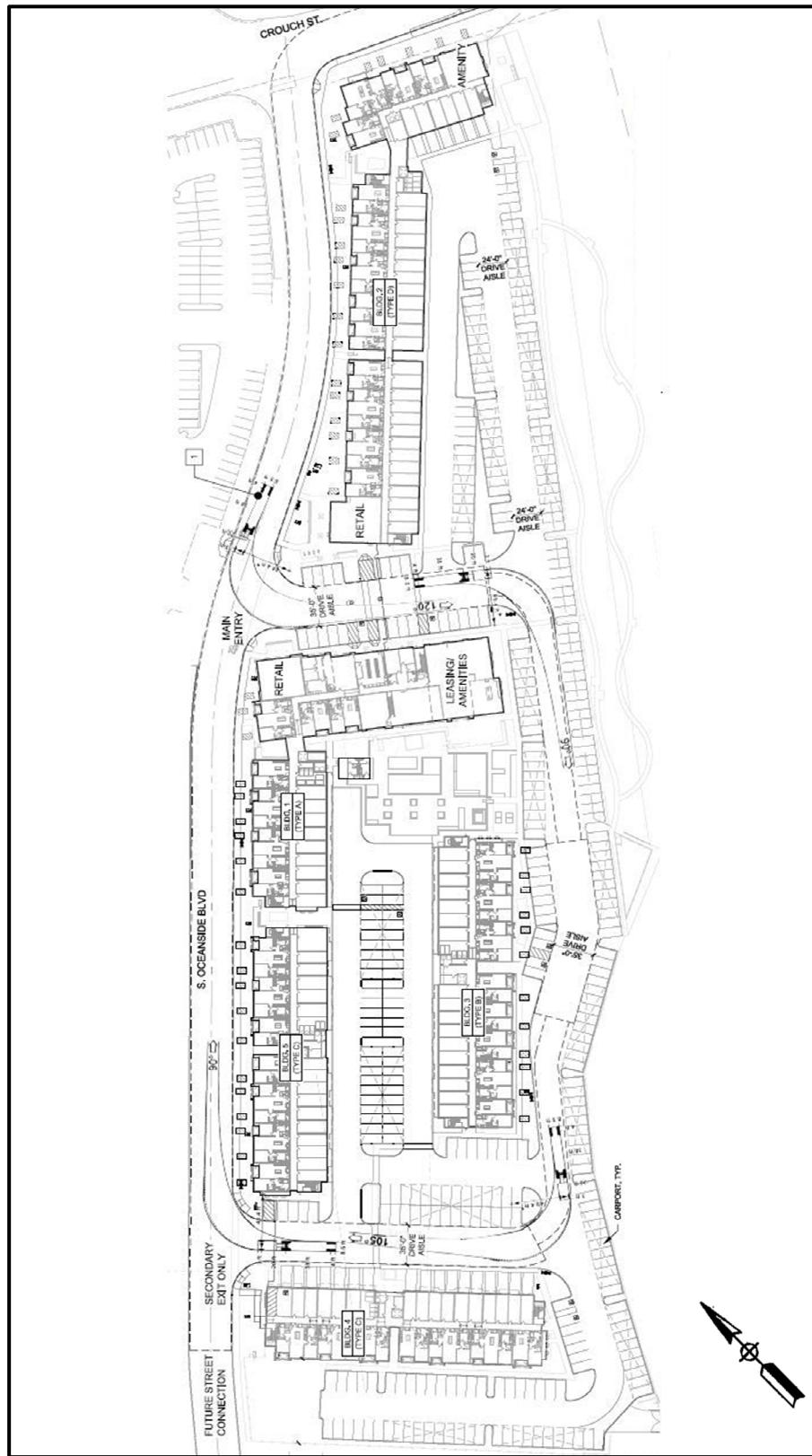
PDFs 1-8 above have been quantified in this analysis, while PDFs 9-11 are not specifically analyzed quantitatively in this analysis. As a result, the proposed project emissions are conservative.

**Figure 1-A: Project Vicinity Map**



Source: (Google, 2021)

**Figure 1-B: Project Configuration**



Source: (ADC, 2022)

## **2.0 EXISTING ENVIRONMENTAL SETTING**

### **2.1 Existing Setting**

The existing site is mostly a vacant lot located south of the existing Crouch Street rail station within the City of Oceanside. A residential development exists to the south of the project site while mostly commercial surrounds the site to the west and north. A vacant lot exists to the east of the project. The site is mostly flat along the frontage of Oceanside Boulevard with elevations roughly 35 feet above mean sea level (MSL). The site then raises to roughly 130 feet above MSL to the southern terminus of the site.

The project is located near the Crouch Street Sprinter light rail station with typical service between about 4 AM to Midnight daily and in each direction. Overall, the Crouch Street Sprinter light rail station would have roughly 80 trips per day. Each train would stop at Crouch Street Station and would be stopped long enough for passengers to exit and enter with typical durations lasting approximately one minute. In addition to the light rail, the rails serve freight once per week. This freight would pass by the site in each direction from Escondido for a total of two pass by events weekly.

### **2.2 Climate (Oceanside)**

Climate within the San Diego Air Basin (SDAB) area varies dramatically over short geographical distances due to size and topography. Most of southern California is dominated by high-pressure systems for much of the year, which keeps the high desert mostly sunny and warm. Typically, during the winter months, the high-pressure system drops to the south and brings cooler, moister weather from the north. Prevailing winds are generally westerly flowing towards the east for most of the year; however, during the autumn and winter, it is common for strong warm dry winds originating in the desert having a more easterly flow characteristic.

Meteorological trends within Oceanside produce daytime highs typically ranging between 65°F in the winter to approximately 78°F in the summer with August usually being the hottest month. Median temperatures range from approximately 55°F in the winter to approximately 70°F in the summer. The average humidity is approximately 64% in the winter and about 72% in the summer (City-Data, 2020).

## 2.3 Regulatory Standards

### 2.3.1 Federal Standards and Definitions

The Federal Air Quality Standards were developed per the requirements of The Federal Clean Air Act, which is a federal law that was passed in 1970 and further amended in 1990. This law provides the basis for the national air pollution control effort. An important element of the act included the development of national ambient air quality standards (NAAQS) for major air pollutants.

The Clean Air Act established two types of air quality standards otherwise known as primary and secondary standards. **Primary Standards** set limits for the intention of protecting public health, which includes sensitive populations such as asthmatics, children and elderly. **Secondary Standards** set limits to protect public welfare to include the protection against decreased visibility, damage to animals, crops, vegetation and buildings.

The EPA Office of Air Quality Planning and Standards (OAQPS) has set NAAQS for principal pollutants, which are called "criteria" pollutants. These pollutants are defined below:

1. **Carbon Monoxide (CO):** is a colorless, odorless, and tasteless gas and is produced from the partial combustion of carbon-containing compounds, notably in internal-combustion engines. Carbon monoxide usually forms when there is a reduced availability of oxygen present during the combustion process. Exposure to CO near the levels of the ambient air quality standards can lead to fatigue, headaches, confusion, and dizziness. CO interferes with the blood's ability to carry oxygen.
2. **Lead (Pb):** is a potent neurotoxin that accumulates in soft tissues and bone over time. The major sources of lead emissions have historically been motor vehicles (such as cars and trucks) and industrial sources. Because lead is only slowly excreted, exposures to small amounts of lead from a variety of sources can accumulate to harmful levels. Effects from inhalation of lead near the level of the ambient air quality standard include impaired blood formation and nerve conduction. Lead can adversely affect the nervous, reproductive, digestive, immune, and blood-forming systems. Symptoms can include fatigue, anxiety, short-term memory loss, depression, weakness in the extremities, and learning disabilities in children.
3. **Nitrogen Dioxide (NO<sub>2</sub>):** is a reactive, oxidizing gas capable of damaging cells lining the respiratory tract and is one of the nitrogen oxides emitted from high-temperature combustion, such as those occurring in trucks, cars, power plants, home heaters, and gas stoves. In the presence of other air contaminants, NO<sub>2</sub> is usually visible as a reddish-brown air layer over urban areas. NO<sub>2</sub> along with other traffic-related pollutants is associated with respiratory symptoms, respiratory illness and respiratory impairment. Studies in animals have reported biochemical, structural, and cellular changes in the lung when exposed to NO<sub>2</sub> above the level of the current state air quality standard. Clinical studies of human subjects suggest that NO<sub>2</sub> exposure to levels near the current standard may worsen the effect of allergens in allergic asthmatics, especially in children.
4. **Particulate Matter (PM<sub>10</sub> or PM<sub>2.5</sub>):** is a complex mixture of tiny particles that consists of dry solid fragments, solid cores with liquid coatings, and small droplets of liquid. These particles vary in shape, size and chemical composition, and can be made up of multiple materials such

as metal, soot, soil, and dust. PM<sub>10</sub> particles are 10 microns ( $\mu\text{m}$ ) or less and PM<sub>2.5</sub> particles are 2.5 ( $\mu\text{m}$ ) or less. These particles can contribute significantly to regional haze and reduction of visibility in California. Exposure to PM levels exceeding current air quality standards increases the risk of allergies such as asthma and respiratory illness.

5. **Ozone (O<sub>3</sub>):** is a highly oxidative unstable gas capable of damaging the linings of the respiratory tract. This pollutant forms in the atmosphere through reactions between chemicals directly emitted from vehicles, industrial plants, and many other sources. Exposure to ozone above ambient air quality standards can lead to human health effects such as lung inflammation, tissue damage and impaired lung functioning. Ozone can also damage materials such as rubber, fabrics and plastics.
6. **Sulfur Dioxide (SO<sub>2</sub>):** is a gaseous compound of sulfur and oxygen and is formed when sulfur-containing fuel is burned by mobile sources, such as locomotives, ships, and off-road diesel equipment. SO<sub>2</sub> is also emitted from several industrial processes, such as petroleum refining and metal processing. Effects from SO<sub>2</sub> exposures at levels near the one-hour standard include bronchoconstriction accompanied by symptoms, which may include wheezing, shortness of breath and chest tightness, especially during exercise or physical activity. Children, the elderly, and people with asthma, cardiovascular disease or chronic lung disease (such as bronchitis or emphysema) are most susceptible to these symptoms. Continued exposure at elevated levels of SO<sub>2</sub> results in increased incidence of pulmonary symptoms and disease, decreased pulmonary function, and increased risk of mortality.

### 2.3.2 State Standards and Definitions

CARB sets the laws and regulations for air quality on the state level. The California Ambient Air Quality Standards (CAAQS) is similar to the NAAQS and also restricts four additional contaminants. Table 2.1 on the following page identifies both the NAAQS and CAAQS. The additional contaminants as regulated by the CAAQS are defined below:

1. **Visibility Reducing Particles:** Particles in the Air that obstruct the visibility.
2. **Sulfates:** are salts of Sulfuric Acid. Sulfates occur as microscopic particles (aerosols) resulting from fossil fuel and biomass combustion. They increase the acidity of the atmosphere and form acid rain.
3. **Hydrogen Sulfide (H<sub>2</sub>S):** is a colorless, toxic and flammable gas with a recognizable smell of rotten eggs or flatulence. H<sub>2</sub>S occurs naturally in crude petroleum, natural gas, volcanic gases, and hot springs. Usually, H<sub>2</sub>S is formed from bacterial breakdown of organic matter. Exposure to low concentrations of hydrogen sulfide may cause irritation to the eyes, nose, or throat. It may also cause difficulty in breathing for some asthmatics. Brief exposures to high concentrations of hydrogen sulfide (greater than 500 Parts per Million (ppm)) can cause a loss of consciousness and possibly death.
4. **Vinyl Chloride:** also known as chloroethene and is a toxic, carcinogenic, colorless gas with a sweet odor. It is an industrial chemical mainly used to produce its polymer, polyvinyl chloride (PVC).

**Table 2.1: Ambient Air Quality Standards**

| Ambient Air Quality Standards  |                         |                                   |   |   |                                |   |  |  |  |  |  |
|--|-------------------------|-----------------------------------|---|---|--------------------------------|---|--|--|--|--|--|
| Pollutant  | Average Time            | California Standards <sup>1</sup> |   | Federal Standards <sup>2</sup>                                    |                                |   |  |  |  |  |  |
|  |                         | Concentration <sup>3</sup>        | Method <sup>4</sup>                       | Primary <sup>3,5</sup>  | Secondary <sup>3,6</sup>       | Method <sup>7</sup>   |  |  |  |  |  |
| Ozone ( $O_3$ ) <sup>8</sup>   | 1 Hour                  | 0.09 ppm<br>(180 $\mu g/m^3$ )    | Ultraviolet Photometry                    | -   | Same as Primary Standard       | Ultraviolet Photometry  |  |  |  |  |  |
|  | 8 Hour                  | 0.070 ppm<br>(137 $\mu g/m^3$ )   |   | 0.070 ppm<br>(137 $\mu g/m^3$ )                                   |                                |   |  |  |  |  |  |
| Respirable Particulate Matter (PM10) <sup>9</sup>  | 24 Hour                 | 50 $\mu g/m^3$                    | Gravimetric or Beta Attenuation           | 150 $\mu g/m^3$   | Same as Primary Standard       | Inertial Separation and Gravimetric Analysis                                      |  |  |  |  |  |
|  | Annual Arithmetic Mean  | 20 $\mu g/m^3$                    |   | -   |                                |   |  |  |  |  |  |
| Fine Particulate Matter (PM2.5) <sup>9</sup>   | 24 Hour                 | No Separate State Standard        |   | 35 $\mu g/m^3$  | Same as Primary Standard       | Inertial Separation and Gravimetric Analysis                                      |  |  |  |  |  |
|  | Annual Arithmetic Mean  | 12 $\mu g/m^3$                    | Gravimetric or Beta Attenuation           | 12.0 $\mu g/m^3$  |                                |   |  |  |  |  |  |
| Carbon Monoxide (CO)   | 8 hour                  | 9.0 ppm<br>(10mg/m <sup>3</sup> ) | Non-Dispersive Infrared Photometry (NDIR) | 9 ppm (10 mg/m <sup>3</sup> )                                     | -                              | Non-Dispersive Infrared Photometry  |  |  |  |  |  |
|  | 1 hour                  | 20 ppm<br>(23 mg/m <sup>3</sup> ) |   | 35 ppm<br>(40 mg/m <sup>3</sup> )                                 |                                |   |  |  |  |  |  |
|  | 8 Hour (Lake Tahoe)     | 6 ppm<br>(7 mg/m <sup>3</sup> )   |   | -   |                                |   |  |  |  |  |  |
| Nitrogen Dioxide (NO <sub>2</sub> ) <sup>10</sup>  | Annual Arithmetic Mean  | 0.030 ppm<br>(57 $\mu g/m^3$ )    | Gas Phase Chemiluminescence               | 0.053 ppm<br>(100 $\mu g/m^3$ ) <sup>8</sup>                      | Same as Primary Standard       | Gas Phase Chemiluminescence   |  |  |  |  |  |
|  | 1 Hour                  | 0.18 ppm<br>(339 $\mu g/m^3$ )    |   | 0.100 ppm <sup>8</sup><br>(188/ $\mu g/m^3$ )                     |                                |   |  |  |  |  |  |
| Sulfur Dioxide (SO <sub>2</sub> ) <sup>11</sup>  | Annual Arithmetic Mean  | -                                 | Ultraviolet Fluorescence                  | 0.030 ppm <sup>10</sup><br>(for Certain Areas)                    | -                              | Ultraviolet Fluorescence; Spectrophotometry (Pararoosaniline Method) <sup>9</sup> |  |  |  |  |  |
|  | 24 Hour                 | 0.04 ppm<br>(105 $\mu g/m^3$ )    |   | 0.14 ppm <sup>10</sup><br>(for Certain Areas)<br>(See Footnote 9) | -                              |   |  |  |  |  |  |
|  | 3 Hour                  | -                                 |   | -   | 0.5 ppm<br>(1300 $\mu g/m^3$ ) |   |  |  |  |  |  |
|  | 1 Hour                  | 0.25 ppm<br>(655 $\mu g/m^3$ )    |   | 75 ppb<br>(196 $\mu g/m^3$ )                                      | -                              |   |  |  |  |  |  |
| Lead <sup>12,13</sup>  | 30 Day Average          | 1.5 $\mu g/m^3$                   | Atomic Absorption                         | -   | -                              | -   |  |  |  |  |  |
|  | Calendar Quarter        | -                                 |   | 1.5 $\mu g/m^3$   | Same as Primary Standard       | High Volume Sampler and Atomic Absorption   |  |  |  |  |  |
|  | Rolling 3-Month Average | -                                 |   | 0.15 $\mu g/m^3$  |                                |   |  |  |  |  |  |
| Visibility Reducing Particles  | 8 Hour                  | See footnote 14                   |   |   |                                |   |  |  |  |  |  |
| Sulfates   | 24 Hour                 | 25 $\mu g/m^3$                    | Ion Chromatography                        |   |                                |   |  |  |  |  |  |
| Hydrogen Sulfide   | 1 Hour                  | 0.03 ppm<br>(42 $\mu g/m^3$ )     | Ultraviolet Fluorescence                  |   |                                |   |  |  |  |  |  |
| Vinyl Chloride <sup>12</sup>   | 24 Hour                 | 0.01 ppm<br>(26 $\mu g/m^3$ )     | Gas Chromatography                        |   |                                |   |  |  |  |  |  |
| <p>1. California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, and particulate matter (PM10, PM2.5, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.</p> <p>2. 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 PM10, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 <math>\mu g/m^3</math> is equal to or less than one. For PM2.5, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the U.S. EPA for further clarification and current national policies.</p> <p>3. 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.</p> <p>4. Any equivalent procedure which can be shown to the satisfaction of the ARB to give equivalent results at or near the level of the air quality standard may be used.</p> <p>5. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.</p> <p>6. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.</p> <p>7. Reference method as described by the EPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the EPA.</p> <p>8. On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.</p> <p>9. On December 14, 2012, the national annual PM2.5 primary standard was lowered from 15 <math>\mu g/m^3</math> to 12.0 <math>\mu g/m^3</math>. The existing national 24-hour PM2.5 standards (primary and secondary) were retained at 35 <math>\mu g/m^3</math>, as was the annual secondary standard of 15 <math>\mu g/m^3</math>. The existing 24-hour PM10 standards (primary and secondary) of 150 <math>\mu g/m^3</math> also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.</p> <p>10. 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.</p> <p>11. 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 nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.</p> <p>12. The ARB 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.</p> <p>13. The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard (1.5 <math>\mu g/m^3</math> as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.</p> <p>14. In 1989, the ARB 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.</p> |                         |                                   |   |   |                                |   |  |  |  |  |  |
| Source: (California Air Resources Board, 5/4/2016)   |                         |                                   |   |   |                                |   |  |  |  |  |  |

### 2.3.3 Regional Standards

The State of California has 35 specific air districts, which are each responsible for ensuring that the criteria pollutants are below the NAAQS and CAAQS. Air basins that exceed either the NAAQS or the CAAQS for any criteria pollutants are designated as “non-attainment areas” for that pollutant. Currently, there are 15 non-attainment areas for the federal ozone standard and two non-attainment areas for the PM<sub>2.5</sub> standard and many areas are in non-attainment for PM<sub>10</sub> as well. California therefore created the California State Implementation Plan (SIP), which is designed to provide control measures needed to attain ambient air quality standards.

The San Diego Air Pollution Control District (SDAPCD) is the government agency which regulates sources of air pollution within the County. Therefore, the SDAPCD developed a Regional Air Quality Strategy (RAQS) to provide control measures to try to achieve attainment status for state ozone standards with control measures focused on Volatile Organic Compounds (VOCs) and oxides of nitrogen (NO<sub>x</sub>). Currently, San Diego is in “non-attainment” status for federal and state O<sub>3</sub> and state PM<sub>10</sub> and PM<sub>2.5</sub>. An attainment plan is available for O<sub>3</sub>. The RAQS was adopted in 1992 and has been updated as recently as 2016 which was the latest update incorporating minor changes to the prior 2009 update.

The 2016 update mostly summarizes how the 2009 update has lowered NO<sub>x</sub> and VOCs emissions which reduces ozone and clarifies and enhances emission reductions by introducing for discussion three new VOC and four new NO<sub>x</sub> reduction measures. NO<sub>x</sub> and VOCs are precursors to the formation of ozone in the atmosphere. The criteria pollutant standards are generally attained when each monitor within the region has had no exceedances during the previous three calendar years. A complete listing of the current attainment status for criteria pollutants with respect to both federal and state nonattainment status by pollutants for County is shown in Table 2.2 (SDAPCD, 2019).

The RAQS is largely based on population predictions by the San Diego Association of Governments (SANDAG). Projects that produce less growth than predicted by SANDAG would generally conform to the RAQS. Projects that create more growth than projected by SANDAG may create a significant impact if the project produces unmitigable air quality emissions or if the project produces cumulative impacts.

**Table 2.2: San Diego Air Basin Attainment Status by Pollutant**

| Criteria Pollutant | Federal Designation | State Designation |
|--------------------|---------------------|-------------------|
| Ozone (8-Hour)     | Nonattainment       | Nonattainment     |
| Ozone (1-Hour)     | Attainment *        | Nonattainment     |
| Carbon Monoxide    | Attainment          | Attainment        |
| PM10               | Unclassifiable **   | Nonattainment     |
| PM2.5              | Attainment          | Nonattainment     |
| Nitrogen Dioxide   | Attainment          | Attainment        |
| Sulfur Dioxide     | Attainment          | Attainment        |
| Lead               | Attainment          | Attainment        |
| Sulfates           | No Federal Standard | Attainment        |
| Hydrogen Sulfide   | No Federal Standard | Unclassified      |
| Visibility         | No Federal Standard | Unclassified      |

\* The federal 1-hour standard of 12 ppbv was in effect from 1979 through June 15, 2005. The revoked standard is referenced here because it was employed for such a long period and because this benchmark is addressed in State Implementation Plans.

\*\* At the time of designation, if the available data does not support a designation of attainment or nonattainment, the area is designated as unclassifiable.

(SDAPCD, 2019)

## 2.4 SDAPCD Rule 20.2 – Air Quality Impact Assessment Screening Thresholds

The SDAPCD has established threshold in Rule 20.2 for the preparation of Air Quality Impact Assessments (AQIA). These screening criteria can be used to demonstrate that a Project's total emissions would not result in a significant impact as defined by CEQA. Since SDAPCD does not have AQIA threshold for emissions of Volatile Organic Compounds (VOCs), the use of the threshold for VOCs is from the South Coast Air Quality Management District for the Coachella Valley. Should emissions be found to exceed these thresholds, additional modeling is required to demonstrate that the Project's total air quality impacts are below the state and federal ambient air quality standards. These screening thresholds for construction and daily operations are shown in Table 2.3.

Non-Criteria pollutants such as Hazardous Air Pollutants (HAPs) or Toxic Air Contaminants (TACs) are also regulated by the SDAPCD. Rule 1200 (Toxic Air Contaminants - New Source Review) adopted on June 12, 1996, requires evaluation of potential health risks for any new, relocated, or modified emission unit which may increase emissions of one or more toxic air contaminants. The rule requires that projects that propose to increase cancer risk between 1 and 10 in one million need to implement toxics best available control technology (T-BACT) or impose the most effective emission limitation, emission control device or control technique to reduce the cancer risk. At no time shall the project increase the cancer risk to over 10 in one million.

**Table 2.3: Screening Threshold for Criteria Pollutants**

| Pollutant   | Total Emissions<br>(Pounds per Day) | Total Emissions<br>(Tons per Year) |
|---|-------------------------------------|------------------------------------|
| Construction Emissions  |                                     |                                    |
| Respirable Particulate Matter (PM <sub>10</sub> and PM <sub>2.5</sub> ) | 100 and 55                          | 15                                 |
| Nitrogen Oxide (NO <sub>x</sub> )                                       | 250                                 | 40                                 |
| Sulfur Oxide (SO <sub>x</sub> )   | 250                                 | 40                                 |
| Carbon Monoxide (CO)  | 550                                 | 100                                |
| Volatile Organic Compounds (VOCs)                                       | 75                                  | 40                                 |
| Reactive Organic Gases (ROG) SCAQMD                                     | 75                                  | 40                                 |
| Operational Emissions   |                                     |                                    |
| Respirable Particulate Matter (PM <sub>10</sub> and PM <sub>2.5</sub> ) | 100 and 55                          | 15                                 |
| Nitrogen Oxide (NO <sub>x</sub> )                                       | 250                                 | 40                                 |
| Sulfur Oxide (SO <sub>x</sub> )   | 250                                 | 40                                 |
| Carbon Monoxide (CO)  | 550                                 | 100                                |
| Lead and Lead Compounds   | 3.2                                 | 0.6                                |
| Volatile Organic Compounds (VOCs)                                       | 75                                  | 40                                 |
| Reactive Organic Gases (ROG) SCAQMD                                     | 75                                  | 40                                 |

Projects creating cancer risks less than one in one million are not required to implement T-BACT technology. This report assumes that Volatile Organic Compounds (VOC) and Reactive Organic Gases (ROG) are essentially the same due to the fact that emissions generated from the Project represent non-methane organic compounds.

## 2.5 SDAPCD Rule 51 – Odor Impacts

The State of California Health and Safety Code, Division 26, Part 4, Chapter 3, Section 41700 SDAPCD Rule 51, and the City's Municipal Code prohibit emissions from any source whatsoever in such quantities of air contaminants or other material that cause injury, detriment, nuisance, or annoyance to the public health or damage to property. Projects required to obtain permits from SDAPCD are evaluated by SDAPCD staff for potential odor nuisance, and conditions may be applied (or control equipment required) where necessary to prevent occurrence of public nuisance.

SDAPCD Rule 51 (Public Nuisance) also prohibits emission of any material that causes nuisance to a considerable number of persons or endangers the comfort, health, or safety of any person. A project that proposes a use that would produce objectionable odors would be deemed to have a significant odor impact if it would affect a considerable number of off-site receptors. Odor issues are very subjective by the nature of odors themselves and due to the fact that their measurements are difficult to quantify. As a result, this guideline is qualitative, and will focus on the existing and potential surrounding uses and location of sensitive receptors.

## 2.6 Local Air Quality

Criteria pollutants are measured continuously throughout the San Diego Air Basin. This data is used to track ambient air quality patterns throughout the County. As mentioned earlier, this data is also used to determine attainment status when compared to the NAAQS and CAAQS.

The SDAPCD is responsible for monitoring and reporting monitoring data. The District operates 10 monitoring sites, which collect data on criteria pollutants. Four additional sites collect meteorological data, which is used by the District to assist with pollutant forecasting, data analysis and characterization of pollutant transport.

SDAPCD published the five year air quality summary for all of the monitoring stations within the San Diego basin (SDAPCD, 2020). The proposed development project is closest to the Camp Pendleton monitoring station however, the closest site with CO data is the Escondido Monitoring station in 2015. Table 2.4 on the following page identifies the criteria pollutants monitored at the aforementioned station.

**Table 2.4: Three-Year Ambient Air Quality Summary near the Project Site**

| Pollutant                                | Closest Recorded Ambient Monitoring Site       | Averaging Time         | CAAQS                | NAAQS                 | 2015  | 2016  | 2017  | 2018  |
|--|--|------------------------|----------------------|-----------------------|-------|-------|-------|-------|
| O <sub>3</sub> (ppm)                     | Camp Pendleton or Escondido Monitoring Station | 1 Hour                 | 0.09 ppm             | No Standard           | 0.09  | 0.08  | 0.09  | 0.08  |
|  |  | 8 Hour                 | 0.070 ppm            | 0.070 ppm             | 0.08  | 0.07  | 0.08  | 0.07  |
| * PM <sub>10</sub> (µg/m <sup>3</sup> )  |  | 24 Hour                | 50 µg/m <sup>3</sup> | 150 µg/m <sup>3</sup> | 30    | -     | -     | N/A   |
|  |  | Annual Arithmetic Mean | 20 µg/m <sup>3</sup> | No Standard           | 19.4  | -     | -     | N/A   |
| * PM <sub>2.5</sub> (µg/m <sup>3</sup> ) |  | 24 Hour                | No Standard -        | 35 µg/m <sup>3</sup>  | 29.4  | -     | -     | N/A   |
|  |  | Annual Arithmetic Mean | 12 µg/m <sup>3</sup> | 15 µg/m <sup>3</sup>  | 8.6   | -     | -     | N/A   |
| NO <sub>2</sub> (ppm)                    |  | Annual Arithmetic Mean | 0.030 ppm            | 0.053 ppm             | 0.006 | 0.006 | 0.006 | 0.005 |
|  |  | 1 Hour                 | 0.18 ppm             | 0.100 ppm             | 0.060 | 0.072 | 0.063 | 0.048 |
| * CO (ppm)                               |  | 1 Hour                 | 20 ppm               | 35 ppm                | 3.1   | -     | -     | N/A   |
|  |  | 8 Hour                 | 9 ppm                | 9 ppm                 | 2.0   | -     | -     | N/A   |

Notes:

- Days exceeded marked with indicate no data available
- \* Data was selected from the Escondido Location

## 2.7 Project Specific California Environmental Quality Act (CEQA) Requirements

The California Environmental Quality Act has provided a checklist to identify the significance of air quality impacts. These guidelines are found in Appendix G of the CEQA guidelines and are as follows:

AIR QUALITY -- Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the Project:

- 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?
- D:* Result in other emissions (such as those leading to odors adversely affecting a substantial number of people?)

## **3.0 METHODOLOGY**

### 3.1 Emissions Calculations

#### Criteria Air Pollutants

Air Quality impacts related to construction and daily operations were calculated using the latest CalEEMod 2020.4.0 air quality model, which was developed by BREEZE Software for the South Coast Air Quality Management District (SCAQMD) in 2017. CalEEMod is the state-wide accepted modeling software for preparing such air quality analysis throughout California and is sensitive to project-specific input including project location, construction schedule, and proposed uses. When project-specific information is not available or known, CalEEMod includes built in default values which are industry-accepted standards to appropriately model and estimate emissions. The construction module in CalEEMod is used to calculate the emissions associated with the construction of the proposed Project and uses methodologies presented in the US EPA AP-42 document with emphasis on Chapter 11.9. The CalEEMod input/output model is shown in **Attachment A** to this report.

#### Construction Health Risk

The worst-case exhaust emissions generated from the proposed project from construction equipment were utilized and calculated within the CalEEMod model. The AERSCREEN dispersion model was then used to determine the concentration for air pollutants at any location near a pollutant generator. Additionally, the model predicts the maximum exposure distance and concentrations. The AERSCREEN input/output file for the proposed project is shown in **Attachment B** at the end of this report. Once the dispersed concentrations of diesel particulates are estimated in the surrounding air, they are used to evaluate estimated exposure to people. Exposure is evaluated by calculating the dose in milligrams per kilogram body weight per day (mg/kg/d). For residential exposure, the breathing rates are determined for specific age groups, so inhalation dose (Dose-air) is calculated for each of these age groups, 3rd trimester, 0<2, 2<9, 2<16, 16<30 and 16-70 years. The following algorithms calculate this dose for exposure through the inhalation pathways. The worst case cancer risk dose calculation is defined in Equation 1 below (OEHHA, 2015).

*Equation 1*

$$Dose_{air} = C_{air} * (BR/BW) * A * EF * (1 \times 10^{-6})$$

- Dose<sub>air</sub> = Dose through inhalation (mg/kg/d)  
C<sub>air</sub> = Concentration in air ( $\mu\text{g}/\text{m}^3$ ) Annual average DPM concentration in  $\mu\text{g}/\text{m}^3$  - SCREEN3 predicts a 1-hr concentration and is corrected to an annual average by multiplying the 1-hr average by 0.08 (US EPA, 1992)  
BR/BW = Daily breathing rate normalized to body weight (L/kg BW-day). See Table I.2 for the daily breathing rate for each age range.

|                    |   |   |
|--------------------|---|---|
| A                  | = | Inhalation absorption factor (assumed to be 1)  |
| EF                 | = | Exposure frequency (unitless, days/365 days)  |
| 1x10 <sup>-6</sup> | = | Milligrams to micrograms conversion ( $10^{-3}$ mg/ µg), cubic meters to liters conversion ( $10^{-3}$ m <sup>3</sup> /l) |

## Cancer Risk

Cancer risk is calculated by multiplying the daily inhalation or oral dose, by a cancer potency factor, the age sensitivity factor, the frequency of time spent at home and the exposure duration divided by averaging time, to yield the excess cancer risk. As described below, the excess cancer risk is calculated separately for each age grouping and then summed to yield cancer risk for any given location. Specific factors as modeled are shown within the project models which is provided as **Attachment C** to this report. The worst case cancer risk calculation is defined in Equation 2 below (OEHHA, 2015).

*Equation 2*

$$\text{RISKinh-res} = \text{DOSEair} \times \text{CPF} \times \text{ASF} \times \text{ED/AT} \times \text{FAH}$$

|             |   |   |
|-------------|---|---|
| RISKinh-res | = | Residential inhalation cancer risk                          |
| DOSEair     | = | Daily inhalation dose (mg/kg-day)                           |
| CPF         | = | Inhalation cancer potency factor (mg/kg-day <sup>-1</sup> ) |
| ASF         | = | Age sensitivity factor for a specified age group (unitless) |
| ED          | = | Exposure duration (in years) for a specified age group      |
| AT          | = | Averaging time for lifetime cancer risk (years)             |
| FAH         | = | Fraction of time spent at home (unitless)                   |

Office of Environmental Health Hazard Assessment (OEHHA) recommends that an exposure duration (residency time) of 30 years be used to estimate individual cancer risk for the Maximally Exposed Individual Resident (MEIR). OEHHA also recommends that the 30-year exposure duration be used as the basis for public notification and risk reduction audits and plans.

Exposure durations of 9-years and 70-years are also recommended to be evaluated for the MEIR to show the range of cancer risk based on residency periods. If a facility is notifying the public regarding cancer risk, the 9-and 70-year cancer risk estimates are useful for people who have resided in their current residence for periods shorter and longer than 30 years.

## Non-Cancer Risk

Non-Cancer risks or risks defined as chronic or acute are also known with respect to DPM and are determined by the hazard index. To calculate hazard index, DPM concentration is divided by its chronic Reference Exposure Levels (REL). Where the total equals or exceeds one, a health hazard is presumed to exist. RELs are published by the Office of Environmental Health

Hazard Assessment (OEHHA, February 2015). Diesel Exhaust has a REL of 5 µg/m<sup>3</sup> and targets the respiratory system.

### Operational Health Risks

Operational health risk analysis typically follow the California Office of Environmental Health Hazard Assessment (OEHHA) methodologies (Office of Environmental Health Hazard Assessment, 2015) as outlined by the California Air Pollution Control Officers Association (CAPCOA, July 2009). Health risk impacts are generally broken up into two various types A and -B. Type A projects are projects which have the potential to emit toxic emissions and have the potential to impact nearby receptors. Type B project place receptors in the vicinity of existing toxic sources like freeways, as high traffic roads or rail yards. Based on this information the proposed project is classified Type B.

Health risks for projects within the San Diego County air basin generally are regulated by SDAPCD. For Type A projects, significance thresholds have been established under SDAPCDs "Hot Spots" and permitting program (SDAPCD Rule 1200 and 1210). Under this program, excess cancer risk significance threshold is set at 10 in a million and acute and chronic, non-carcinogenic health effect, a hazard index of one must not be exceeded.

For Type B projects, there are no clear significance thresholds. California Environmental Quality Act (CEQA) statutes encourage an air district or any lead agency to establish Type B significance thresholds under CEQA for any pollutant. While there are considerations that support the establishment of thresholds, there is no obligation to do so. Significance thresholds for Type B projects within the City of Oceanside and the County of San Diego have also not been defined.

In the absence of Type B risk screening thresholds, jurisdiction often use The California Air Resources Board (CARB) recommend setback distances. For example, CARB recommends that sensitive uses be set back 1,000 feet from a major service and maintenance rail yard. (CARB, 2005). The term rail yard is somewhat general though as it was analyzed by CARB it is meant to represent a major rail activity and does not mean rail tracks. The "rail yard" as analyzed within CARBs study encompassed the Roseville Rail Yard (Yard) in northern California which is an area of about 950 acres on a one-quarter mile wide area over four-mile long strip. This yard is one of the largest service and maintenance rail yards in the West with over 30,000 heavy rail locomotives visiting annually each having a typical horsepower (HP)rating of 3,000 HP.

The closest major service and maintenance rail yard to the project is on Camp Pendleton, approximately 3 miles away which would generate a less than significant health risk impact

to the project since the nearest rail yard is greater than 1,000 feet from the proposed development.

The project is located near the Crouch Street Sprinter Light Rail Station with typical service between about 4 AM to Midnight daily and in each direction. Overall, the Crouch Street Sprinter light rail station would have roughly 80 trips per day with each train having a 425 HP diesel motor. Each train would stop at Crouch Street Station and would be stopped long enough for passengers to exit and enter with typical durations lasting approximately one minute. Given this, the operational footprint for the Crouch Street Station would not fit the general definition of "rail yard" as was analyzed within the CARB study and since the Crouch Street station would use much smaller diesel trains operational health risks from Crouch Street would not be expected. In addition, the rail adjacent to the site would have two freight train trips passing the site weekly (Inbound and Outbound) with deliveries to Escondido, CA. This freight train is a pass by event and would not stop at the Crouch Street station. Based on this, the pass by event would generate a less than significant health risk to residential uses onsite.

#### Operational Health Risk

The project does not contain any industrial uses that have the potential to create a health risk at adjacent land uses. Therefore, no operational health risks are anticipated and no analysis was required. Given this, impacts to health risks would be less than significant.

### 3.2 Construction Assumptions

Project construction dates were estimated based on a construction start date in 2023 with construction ending in 2025. CalEEMod was utilized for all construction calculations and has been manually updated to reflect SDAPCD Rule 67 VOC paint standards and PDFs identified in Section 1.4. Table 3.1 shows the expected timeframes for the construction of project infrastructure, facilities, and improvements, as well as the expected number of pieces of equipment. Also, it should be noted that this would be conservative in the event construction began/ended at a later date, as annual code updates and fleet improvements typically have the effect of restricting and limiting emissions on construction equipment over time.

**Table 3.1: Expected Construction Equipment**

| Equipment Identification     | Proposed Start | Proposed Complete | Quantity |
|------------------------------|----------------|-------------------|----------|
| <b>Site Preparation</b>      | 08/01/2023     | 08/28/2023        |          |
| Rubber Tired Dozers          |                |                   | 3        |
| Tractors/Loaders/Backhoes    |                |                   | 4        |
| <b>Grading</b>               | 08/29/2023     | 10/30/2023        |          |
| Excavators                   |                |                   | 2        |
| Graders                      |                |                   | 1        |
| Rubber Tired Dozers          |                |                   | 1        |
| Scrapers                     |                |                   | 2        |
| Tractors/Loaders/Backhoes    |                |                   | 2        |
| <b>Paving</b>                | 10/31/2023     | 07/07/2025        |          |
| Pavers                       |                |                   | 2        |
| Paving Equipment             |                |                   | 2        |
| Rollers                      |                |                   | 2        |
| <b>Building Construction</b> | 07/08/2025     | 8/25/2025         |          |
| Cranes                       |                |                   | 1        |
| Forklifts                    |                |                   | 3        |
| Generator Sets               |                |                   | 1        |
| Tractors/Loaders/Backhoes    |                |                   | 3        |
| Welders                      |                |                   | 1        |
| <b>Architectural Coating</b> | 08/26/2025     | 10/13/2025        |          |
| Air Compressors              |                |                   | 1        |

This equipment list is based upon equipment inventory within CalEEMod. The quantity and types are based upon assumptions provided by the project applicant.

### 3.3 Operational Emissions Assumptions and Methodology

Once construction is completed, the proposed project would generate emissions from daily operations which would include sources such as Area, Energy, Mobile, Waste and Water uses, which are also calculated within CalEEMod. Area Sources include consumer products, landscaping and architectural coatings as part of regular maintenance. Energy sources would be from uses such as onsite natural gas use. Finally, mobile or transportation related emissions are calculated in CalEEMod. The operational model is also provided in **Attachment A**.

The traffic inputs for CalEEMod were adjusted to be consistent with the proposed project traffic study (Urban Systems Associates, Inc., 2022). These traffic numbers were utilized within the CalEEMod analysis. The model also estimates emission predictions for ROG, NOx, CO, SO<sub>2</sub>, PM<sub>10</sub> and PM<sub>2.5</sub> for area source assumptions. Additionally, it was assumed that an average of 10% of the structural surface area will be re-painted each year. Finally, since the proposed project would not be installing hearth options, CalEEMod default hearth settings were modified to represent no hearth options.

Consumer product emissions are generated by a wide range of product categories, including air fresheners, automotive products, household cleaners, and personal care products. Emissions associated with these products primarily depend on the increased population associated with residential development. Default emission factors were utilized within CalEEMod.

### 3.4 Odor Impacts

The occurrence and severity of potential odor impacts depends on numerous factors. The nature, frequency, and intensity of the source; the wind speeds and direction; and the sensitivity of receiving location each contribute to the intensity of the impact. Although offensive odors seldom cause physical harm, they can be annoying and cause distress among the public and generate citizen complaints.

## **4.0 FINDINGS**

### **4.1 Consistency with RAQS and SIP**

As mentioned in Section 2.3.3 of this analysis, the RAQS is based on population predictions from SANDAG. Projects that produce growth in accordance with SANDAG's projections would generally conform to the RAQS. Since the proposed project is compatible with the general plan land use designation, the construction emissions would not conflict with the RAQS.

The RAQS is updated regularly with the last update being completed in 2016. The proposed project has been designed to conform to the Housing Element of the City's General Plan which suggest the site could have as many as 305 units. Since the project has been designed in accordance with growth projections identified within the Housing Element, and since direct construction and operational impacts are not expected, the project would be consistent with San Diego's Regional Air Quality Strategy (RAQS) and would also conform to the State Implement Plan (SIP).

### **4.2 Construction Findings**

Construction emissions in pounds per day from the construction activities and equipment identified in Section 3.2 above is shown in Table 4.1 below. Based on these numbers, the proposed project would not exceed City standards, and would not require mitigation. It should be noted that, as a design feature, the proposed project construction team will utilize Tier 3 diesel construction equipment with DPF, and architectural coatings would conform to SDAPCD Rule 67 as indicated by the applicant.

**Table 4.1: Expected Construction Emissions Summary**

| <b>Year</b>                                    | <b>ROG</b>   | <b>NO<sub>x</sub></b> | <b>CO</b>    | <b>SO<sub>2</sub></b> | <b>PM<sub>10</sub><br/>(Dust)</b> | <b>PM<sub>10</sub><br/>(Exhaust)</b> | <b>PM<sub>10</sub><br/>(Total)</b> | <b>PM<sub>2.5</sub><br/>(Dust)</b> | <b>PM<sub>2.5</sub><br/>(Exhaust)</b> | <b>PM<sub>2.5</sub><br/>(Total)</b> |
|--|--------------|-----------------------|--------------|-----------------------|-----------------------------------|--------------------------------------|------------------------------------|------------------------------------|---------------------------------------|-------------------------------------|
| 2023   | 1.64         | 33.68                 | 38.21        | 0.08                  | 19.80                             | 0.23                                 | 19.95                              | 10.14                              | 0.23                                  | 10.28                               |
| 2024   | 1.45         | 17.08                 | 24.96        | 0.06                  | 2.66                              | 0.16                                 | 2.82                               | 0.71                               | 0.16                                  | 0.88                                |
| 2025   | 63.26        | 18.45                 | 27.56        | 0.06                  | 3.11                              | 0.18                                 | 3.29                               | 0.83                               | 0.18                                  | 1.01                                |
| <b>Maximum</b>                                 | <b>63.26</b> | <b>33.68</b>          | <b>38.21</b> | <b>0.08</b>           | <b>19.80</b>                      | <b>0.23</b>                          | <b>19.95</b>                       | <b>10.14</b>                       | <b>0.23</b>                           | <b>10.28</b>                        |
| <b>Significance<br/>Threshold<br/>(lb/day)</b> | <b>75</b>    | <b>250</b>            | <b>550</b>   | <b>250</b>            | -                                 | -                                    | <b>100</b>                         | -                                  | -                                     | <b>55</b>                           |
| <b>SDAPCD<br/>Impact?</b>                      | <b>No</b>    | <b>No</b>             | <b>No</b>    | <b>No</b>             | -                                 | -                                    | <b>No</b>                          | -                                  | -                                     | <b>No</b>                           |

Given these findings, project emissions would not exceed SDAPCD air quality standards during construction and impacts would be less than significant. No mitigation measures will be necessary.

#### 4.3 Health Risk

##### Project Construction

Based upon the air quality modeling and assuming Tier 3 equipment with DPF as a design feature to the proposed project, worst-case onsite PM<sub>10</sub> from onsite construction exhaust would cumulatively produce 0.0378 tons over the construction duration (755 days) or an average of 0.00052 grams/second.

Utilizing the AERSCREEN dispersion model, the peak maximum 1-hr concentration is 0.2908 µg/m<sup>3</sup> during the worst-case construction period. Converting the peak 1-hr concentration to an annual concentration by multiplying it by 0.08 (US EPA, 1992) yields an annual concentration of 0.0233 µg/m<sup>3</sup>. Therefore, utilizing the risk equation identified above in Section 3.1, the inhalation cancer risk is 8.32 per million exposed at the point of maximum exposure 175 meters away (574 feet) as predicted by AERSCREEN and shown in the model outputs (**Attachment B**). It should be again noted that a PDF would be to utilize Tier 3 diesel equipment with DPF attached inline to the exhaust system and would be a condition to the proposed project and is considered T-BACT. Since the threshold is 10 per million exposed with T-BACT installed, the project would have a less than significant impact under CEQA and would be in compliance with the City's thresholds. Since the calculated risk is at the point of maximum exposure, all receptor points near the project would have a risk which does not exceed 8.32 per one million exposed.

There are known acute and chronic health risks associated with diesel exhaust which are considered non-cancer risks. These risks are calculated based on methods identified in Section 3.1 of this report. From this we find that the hourly concentration of 0.2908 µg/m<sup>3</sup> divided by the REL of 5 µg/m<sup>3</sup> yields a Health Hazard Index of 0.06, which is less than one. Therefore, based on thresholds for non-cancer risks in Section 3.1 above, non-cancer health risks are considered less than significant.

A review of cumulative projects nearest the proposed Project was conducted on the City's GIS database (City of Oceanside, 2021). From that review, it was discovered that a number of approved projects near the proposed Jefferson Oceanside Apartment project though would be mostly insignificant with respect to cumulative air quality impacts since the projects are mostly small. The closest and largest of these projects would be a 27-unit residential development to the southwest (Grandview Point). The geometric centroids between these

projects is roughly 320 meters. Since the point of maximum exposure from the Jefferson Oceanside project was found to be 175 meters (574 feet), significant cumulative air quality impacts would not be expected.

### Project Operations

The project does not contain any industrial uses that have the potential to create a health risk at adjacent land uses. Therefore, no operational health risks are anticipated and no analysis was required. Given this, impacts to health risks would be less than significant.

#### 4.4 Operational Findings

The proposed project would be operational in the year 2026 and would incorporate a number of PDFs as noted in Section 1.4 above and are included within this analysis. The daily pollutant emissions as calculated within CalEEMod are shown in Table 4.2 below and are well below the SDAPCD thresholds for all categories. Based on this analysis, the proposed project would generate a less than significant direct operational impact.

**Table 4.2: Expected Daily Pollutant Generation**

|                        | <b>ROG</b>   | <b>NO<sub>x</sub></b> | <b>CO</b>    | <b>SO<sub>x</sub></b> | <b>PM<sub>10</sub></b> | <b>PM<sub>2.5</sub></b> |
|------------------------|--------------|-----------------------|--------------|-----------------------|------------------------|-------------------------|
| <b>Summer Scenario</b> |              |                       |              |                       |                        |                         |
| Area                   | 8.19         | 0.28                  | 24.35        | 0.00                  | 0.14                   | 0.14                    |
| Energy                 | 0.08         | 0.68                  | 0.35         | 0.00                  | 0.05                   | 0.05                    |
| Mobile                 | 7.00         | 4.88                  | 43.18        | 0.08                  | 8.30                   | 2.25                    |
| <b>Total (Lb/Day)</b>  | <b>15.28</b> | <b>5.84</b>           | <b>67.88</b> | <b>0.08</b>           | <b>8.49</b>            | <b>2.44</b>             |
| SDAPCD Thresholds      | 75           | 250                   | 550          | 250                   | 100                    | 55                      |
| <b>Significant?</b>    | <b>No</b>    | <b>No</b>             | <b>No</b>    | <b>No</b>             | <b>No</b>              | <b>No</b>               |
| <b>Winter Scenario</b> |              |                       |              |                       |                        |                         |
| Area                   | 8.19         | 0.28                  | 24.35        | 0.00                  | 0.14                   | 0.14                    |
| Energy                 | 0.08         | 0.68                  | 0.35         | 0.00                  | 0.05                   | 0.05                    |
| Mobile                 | 6.65         | 5.31                  | 46.91        | 0.07                  | 8.30                   | 2.25                    |
| <b>Total (Lb/Day)</b>  | <b>14.92</b> | <b>6.27</b>           | <b>71.61</b> | <b>0.08</b>           | <b>8.49</b>            | <b>2.44</b>             |
| SDAPCD Thresholds      | 75           | 250                   | 550          | 250                   | 100                    | 55                      |
| <b>Significant?</b>    | <b>No</b>    | <b>No</b>             | <b>No</b>    | <b>No</b>             | <b>No</b>              | <b>No</b>               |

#### 4.5 Odors

Odors would be potentially generated from vehicles and equipment exhaust emissions during construction of the proposed project. Potential odors produced during construction would be

attributable to concentrations of unburned hydrocarbons from tailpipes of construction equipment. Such odors would disperse rapidly from the project site and generally occur at magnitudes that would not affect substantial numbers of people due to the project's location and distance from any residential receptors and due to prevailing winds which blow from west to east towards open space/undeveloped lands. Therefore, impacts associated with odors during construction would be less than significant.

Generally, land uses and industrial operations associated with odor complaints include agricultural uses, wastewater treatment plants, food-processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding. The proposed project would not specifically fit within these general categories and would be expected to generate less than significant odor impacts.

The proposed commercial/retail use may however contain a fast-food restaurant without a drive through. Odor impacts from restaurants are possible though mitigated through the use of exhaust filtration systems which are fairly typical. Should a fast-food restaurant utilize the commercial/retail space proposed, exhaust filtration systems will be required and the restaurant applicant would be required to demonstrate that odor impacts would be less than significant within the residential development.

#### 4.6 Conclusion of Findings

The air quality analysis has been prepared to include certain PDFs as identified in Section 1.4 of this report. Since all modeling assumes these PDFs have been included at a minimum, the PDFs identified would be required as Conditions of Approval by the City of Oceanside. Based upon the analysis of project construction and operation activities, neither direct construction nor direct operational impacts would be expected.

A cursory review of potential offsite health risk sources was conducted and based on that review no significant sources exist. The nearby Crouch Street light rail station was considered as a potential source however since the light rail station consisted of much smaller trains which stopped at the site as well as two weekly pass by freight trips was ruled out as a major health risk since the light rail station and two freight pass by trips would not classify as a rail yard as defined by CARB. With this, the project site would not meet California Air Resources Board's (CARB) locational guidance for preparation of such an analysis.

As part of the City's Housing Element the Community Commercial use allows for a density of up to 29 Units per gross acre and estimates that the project could be developed with as many as 305 units (City of Oceanside, 2013). The project site has been designed to have a density of 22.9 units per acre with some retail. Since the proposed project would construct only 295

of the projected 305 units within the housing element, the project would be consistent with RAQS and the SIP. These updated projections will accurately reflect anticipated growth due to the Housing Element.

Odors would be potentially generated from vehicles and equipment exhaust emissions during construction of the proposed project. Potential odors produced during construction would be attributable to concentrations of unburned hydrocarbons from tailpipes of construction equipment. Such odors would disperse rapidly from the project site and generally occur at magnitudes that would not affect substantial numbers of people due to the project's location and distance from any residential receptors and due to prevailing winds which blow from west to east towards open space/undeveloped lands. Therefore, impacts associated with odors during construction would be less than significant.

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## **5.0 REFERENCES**

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**ATTACHMENT A**

CalEEMod 2020.4.0 Summer, Winter, Annual

## Jefferson Oceanside Mixed Use Development - San Diego County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied****Jefferson Oceanside Mixed Use Development**

San Diego County, Summer

**1.0 Project Characteristics****1.1 Land Usage**

| Land Uses                           | Size   | Metric        | Lot Acreage | Floor Surface Area | Population |
|-------------------------------------|--------|---------------|-------------|--------------------|------------|
| Parking Lot                         | 375.00 | Space         | 3.37        | 150,000.00         | 0          |
| Fast Food Restaurant w/o Drive Thru | 3.00   | 1000sqft      | 0.07        | 3,000.00           | 0          |
| Apartments Mid Rise                 | 295.00 | Dwelling Unit | 15.48       | 295,000.00         | 844        |

**1.2 Other Project Characteristics**

|                            |                          |                            |       |                            |       |
|----------------------------|--------------------------|----------------------------|-------|----------------------------|-------|
| Urbanization               | Urban                    | Wind Speed (m/s)           | 2.6   | Precipitation Freq (Days)  | 40    |
| Climate Zone               | 13                       |                            |       | Operational Year           | 2026  |
| Utility Company            | San Diego Gas & Electric |                            |       |                            |       |
| CO2 Intensity<br>(lb/MWhr) | 409.42                   | CH4 Intensity<br>(lb/MWhr) | 0.025 | N2O Intensity<br>(lb/MWhr) | 0.003 |

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

## Project Characteristics - RPS 2026

Land Use - Project Site is 18.85 acres - Developed Area is 9.91 Acres. Total Parking is 91 Garage Spaces within facility footprint and 375 parking space outside facility footprint made up of carports and surface parking

Construction Phase - Construction Schedule

Off-road Equipment -

Trips and VMT -

Grading -

Architectural Coating - Rule 67 Paint

Vehicle Trips - Trip Generation and VMT from Project Traffic Study.

Vehicle Emission Factors -

## Jefferson Oceanside Mixed Use Development - San Diego County, Summer

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

Vehicle Emission Factors -

Vehicle Emission Factors -

Woodstoves - No hearth options

Area Coating - Rule 67 Paint

Energy Use -

Solid Waste -

Construction Off-road Equipment Mitigation - T3 with DPF

Mobile Land Use Mitigation -

Area Mitigation -

Energy Mitigation -

Water Mitigation -

Waste Mitigation -

Fleet Mix -

| Table Name              | Column Name                     | Default Value | New Value |
|-------------------------|---------------------------------|---------------|-----------|
| tblArchitecturalCoating | EF_Nonresidential_Exterior      | 250.00        | 100.00    |
| tblArchitecturalCoating | EF_Nonresidential_Interior      | 250.00        | 100.00    |
| tblArchitecturalCoating | EF_Parking                      | 250.00        | 100.00    |
| tblArchitecturalCoating | EF_Residential_Exterior         | 250.00        | 100.00    |
| tblArchitecturalCoating | EF_Residential_Interior         | 250.00        | 100.00    |
| tblAreaCoating          | Area_EF_Nonresidential_Exterior | 250           | 100       |
| tblAreaCoating          | Area_EF_Nonresidential_Interior | 250           | 100       |
| tblAreaCoating          | Area_EF_Parking                 | 250           | 100       |
| tblAreaCoating          | Area_EF_Residential_Exterior    | 250           | 100       |
| tblAreaCoating          | Area_EF_Residential_Interior    | 250           | 100       |
| tblConstEquipMitigation | DPF                             | No Change     | Level 3   |
| tblConstEquipMitigation | DPF                             | No Change     | Level 3   |
| tblConstEquipMitigation | DPF                             | No Change     | Level 3   |
| tblConstEquipMitigation | DPF                             | No Change     | Level 3   |

Jefferson Oceanside Mixed Use Development - San Diego County, Summer

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

## Jefferson Oceanside Mixed Use Development - San Diego 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    |
| tblConstructionPhase      | NumDays            | 20.00     | 61.00     |
| tblConstructionPhase      | NumDays            | 300.00    | 440.00    |
| tblConstructionPhase      | NumDays            | 30.00     | 45.00     |
| tblConstructionPhase      | NumDays            | 20.00     | 35.00     |
| tblConstructionPhase      | NumDays            | 10.00     | 20.00     |
| tblFireplaces             | NumberGas          | 162.25    | 0.00      |
| tblFireplaces             | NumberNoFireplace  | 29.50     | 0.00      |
| tblFireplaces             | NumberWood         | 103.25    | 0.00      |
| tblGrading                | MaterialExported   | 0.00      | 10,100.00 |
| tblLandUse                | LotAcreage         | 7.76      | 15.48     |
| tblProjectCharacteristics | CH4IntensityFactor | 0.033     | 0.025     |
| tblProjectCharacteristics | CO2IntensityFactor | 539.98    | 409.42    |
| tblProjectCharacteristics | N2OIntensityFactor | 0.004     | 0.003     |
| tblVehicleTrips           | CC_TL              | 7.30      | 0.13      |
| tblVehicleTrips           | CC_TTP             | 79.50     | 100.00    |
| tblVehicleTrips           | CNW_TL             | 7.30      | 0.00      |
| tblVehicleTrips           | CNW_TTP            | 19.00     | 0.00      |
| tblVehicleTrips           | CW_TL              | 9.50      | 0.00      |
| tblVehicleTrips           | CW_TTP             | 1.50      | 0.00      |
| tblVehicleTrips           | DV_TP              | 11.00     | 0.00      |
| tblVehicleTrips           | DV_TP              | 37.00     | 0.00      |
| tblVehicleTrips           | HO_TL              | 7.50      | 0.00      |
| tblVehicleTrips           | HO_TTP             | 39.60     | 0.00      |

## Jefferson Oceanside Mixed Use Development - San Diego County, Summer

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

|                 |                    |        |        |
|-----------------|--------------------|--------|--------|
| tblVehicleTrips | HS_TL              | 7.30   | 0.00   |
| tblVehicleTrips | HS_TTP             | 18.80  | 0.00   |
| tblVehicleTrips | HW_TL              | 10.80  | 5.92   |
| tblVehicleTrips | HW_TTP             | 41.60  | 100.00 |
| tblVehicleTrips | PB_TP              | 3.00   | 0.00   |
| tblVehicleTrips | PB_TP              | 12.00  | 0.00   |
| tblVehicleTrips | PR_TP              | 86.00  | 100.00 |
| tblVehicleTrips | PR_TP              | 51.00  | 100.00 |
| tblVehicleTrips | ST_TR              | 4.91   | 6.00   |
| tblVehicleTrips | ST_TR              | 696.00 | 700.00 |
| tblVehicleTrips | SU_TR              | 4.09   | 6.00   |
| tblVehicleTrips | SU_TR              | 500.00 | 700.00 |
| tblVehicleTrips | WD_TR              | 5.44   | 6.00   |
| tblVehicleTrips | WD_TR              | 346.23 | 700.00 |
| tblWoodstoves   | NumberCatalytic    | 14.75  | 0.00   |
| tblWoodstoves   | NumberNoncatalytic | 14.75  | 0.00   |

**2.0 Emissions Summary**

## Jefferson Oceanside Mixed Use Development - San Diego 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    | 3.4400         | 38.2211        | 29.5410        | 0.0803        | 19.8049        | 1.4565        | 21.0717        | 10.1417        | 1.3412        | 11.3071        | 0.0000        | 8,016.0335        | 8,016.0335        | 2.0418        | 0.2988        | 8,156.1217        |  |
| 2024    | 2.2487         | 16.2937        | 23.2558        | 0.0578        | 2.6615         | 0.6399        | 3.3015         | 0.7147         | 0.6020        | 1.3167         | 0.0000        | 5,799.6164        | 5,799.6164        | 0.6935        | 0.2266        | 5,884.4776        |  |
| 2025    | 64.0660        | 16.4774        | 25.7430        | 0.0637        | 3.1134         | 0.6074        | 3.7207         | 0.8346         | 0.5744        | 1.4089         | 0.0000        | 6,397.5686        | 6,397.5686        | 0.7111        | 0.2290        | 6,483.5881        |  |
| Maximum | <b>64.0660</b> | <b>38.2211</b> | <b>29.5410</b> | <b>0.0803</b> | <b>19.8049</b> | <b>1.4565</b> | <b>21.0717</b> | <b>10.1417</b> | <b>1.3412</b> | <b>11.3071</b> | <b>0.0000</b> | <b>8,016.0335</b> | <b>8,016.0335</b> | <b>2.0418</b> | <b>0.2988</b> | <b>8,156.1217</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    | 1.6413         | 33.6837        | 38.2124        | 0.0803        | 19.8049        | 0.2270        | 19.9476        | 10.1417        | 0.2255        | 10.2843        | 0.0000        | 8,016.0335        | 8,016.0335        | 2.0418        | 0.2988        | 8,156.1217        |  |
| 2024    | 1.4510         | 17.0760        | 24.9627        | 0.0578        | 2.6615         | 0.1622        | 2.8237         | 0.7147         | 0.1606        | 0.8753         | 0.0000        | 5,799.6164        | 5,799.6164        | 0.6935        | 0.2266        | 5,884.4776        |  |
| 2025    | 63.2611        | 18.4453        | 27.5554        | 0.0637        | 3.1134         | 0.1781        | 3.2914         | 0.8346         | 0.1764        | 1.0109         | 0.0000        | 6,397.5686        | 6,397.5686        | 0.7111        | 0.2290        | 6,483.5881        |  |
| Maximum | <b>63.2611</b> | <b>33.6837</b> | <b>38.2124</b> | <b>0.0803</b> | <b>19.8049</b> | <b>0.2270</b> | <b>19.9476</b> | <b>10.1417</b> | <b>0.2255</b> | <b>10.2843</b> | <b>0.0000</b> | <b>8,016.0335</b> | <b>8,016.0335</b> | <b>2.0418</b> | <b>0.2988</b> | <b>8,156.1217</b> |  |

## Jefferson Oceanside Mixed Use Development - San Diego 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  | N20  | CO2e |
|-------------------|------|------|--------|------|---------------|--------------|------------|----------------|---------------|-------------|----------|----------|-----------|------|------|------|
| Percent Reduction | 4.88 | 2.52 | -15.52 | 0.00 | 0.00          | 79.02        | 7.23       | 0.00           | 77.66         | 13.27       | 0.00     | 0.00     | 0.00      | 0.00 | 0.00 | 0.00 |

## Jefferson Oceanside Mixed Use Development - San Diego 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         | 8.1944         | 0.2804        | 24.3533        | 1.2900e-003   |               | 0.1351        | 0.1351        |                | 0.1351        | 0.1351        | 0.0000        | 43.9057           | 43.9057           | 0.0422        | 0.0000        | 44.9602           |
| Energy       | 0.0788         | 0.6822        | 0.3484         | 4.3000e-003   |               | 0.0545        | 0.0545        |                | 0.0545        | 0.0545        |               | 860.1111          | 860.1111          | 0.0165        | 0.0158        | 865.2223          |
| Mobile       | 7.0031         | 4.8774        | 43.1809        | 0.0765        | 8.2379        | 0.0635        | 8.3013        | 2.1943         | 0.0591        | 2.2534        |               | 8,048.5818        | 8,048.5818        | 0.7288        | 0.4368        | 8,196.9731        |
| <b>Total</b> | <b>15.2763</b> | <b>5.8400</b> | <b>67.8826</b> | <b>0.0821</b> | <b>8.2379</b> | <b>0.2530</b> | <b>8.4909</b> | <b>2.1943</b>  | <b>0.2486</b> | <b>2.4430</b> | <b>0.0000</b> | <b>8,952.5985</b> | <b>8,952.5985</b> | <b>0.7875</b> | <b>0.4526</b> | <b>9,107.1556</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         | 8.1944         | 0.2804        | 24.3533        | 1.2900e-003   |               | 0.1351        | 0.1351        |                | 0.1351        | 0.1351        | 0.0000        | 43.9057           | 43.9057           | 0.0422        | 0.0000        | 44.9602           |
| Energy       | 0.0788         | 0.6822        | 0.3484         | 4.3000e-003   |               | 0.0545        | 0.0545        |                | 0.0545        | 0.0545        |               | 860.1111          | 860.1111          | 0.0165        | 0.0158        | 865.2223          |
| Mobile       | 7.0031         | 4.8774        | 43.1809        | 0.0765        | 8.2379        | 0.0635        | 8.3013        | 2.1943         | 0.0591        | 2.2534        |               | 8,048.5818        | 8,048.5818        | 0.7288        | 0.4368        | 8,196.9731        |
| <b>Total</b> | <b>15.2763</b> | <b>5.8400</b> | <b>67.8826</b> | <b>0.0821</b> | <b>8.2379</b> | <b>0.2530</b> | <b>8.4909</b> | <b>2.1943</b>  | <b>0.2486</b> | <b>2.4430</b> | <b>0.0000</b> | <b>8,952.5985</b> | <b>8,952.5985</b> | <b>0.7875</b> | <b>0.4526</b> | <b>9,107.1556</b> |

## Jefferson Oceanside Mixed Use Development - San Diego 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  | N20  | CO2e |
|-------------------|------|------|------|------|---------------|--------------|------------|----------------|---------------|-------------|----------|----------|-----------|------|------|------|
| Percent Reduction | 0.00 | 0.00 | 0.00 | 0.00 | 0.00          | 0.00         | 0.00       | 0.00           | 0.00          | 0.00        | 0.00     | 0.00     | 0.00      | 0.00 | 0.00 | 0.00 |

**3.0 Construction Detail****Construction Phase**

| Phase Number | Phase Name            | Phase Type            | Start Date | End Date   | Num Days Week | Num Days | Phase Description |
|--------------|-----------------------|-----------------------|------------|------------|---------------|----------|-------------------|
| 1            | Site Preparation      | Site Preparation      | 8/1/2023   | 8/28/2023  | 5             | 20       |                   |
| 2            | Grading               | Grading               | 8/29/2023  | 10/30/2023 | 5             | 45       |                   |
| 3            | Paving                | Paving                | 10/31/2023 | 12/18/2023 | 5             | 35       |                   |
| 4            | Building Construction | Building Construction | 12/19/2023 | 8/25/2025  | 5             | 440      |                   |
| 5            | Architectural Coating | Architectural Coating | 6/1/2025   | 8/25/2025  | 5             | 61       |                   |

Acres of Grading (Site Preparation Phase): 30

Acres of Grading (Grading Phase): 135

Acres of Paving: 3.37

Residential Indoor: 597,375; Residential Outdoor: 199,125; Non-Residential Indoor: 4,500; Non-Residential Outdoor: 1,500; Striped Parking Area: 9,000 (Architectural Coating – sqft)

**OffRoad Equipment**

| Phase Name       | Offroad Equipment Type    | Amount | Usage Hours | Horse Power | Load Factor |
|------------------|---------------------------|--------|-------------|-------------|-------------|
| Site Preparation | Rubber Tired Dozers       | 3      | 8.00        | 247         | 0.40        |
| Site Preparation | Tractors/Loaders/Backhoes | 4      | 8.00        | 97          | 0.37        |
| Grading          | Excavators                | 2      | 8.00        | 158         | 0.38        |
| Grading          | Graders                   | 1      | 8.00        | 187         | 0.41        |
| Grading          | Rubber Tired Dozers       | 1      | 8.00        | 247         | 0.40        |
| Grading          | Scrapers                  | 2      | 8.00        | 367         | 0.48        |

## Jefferson Oceanside Mixed Use Development - San Diego County, Summer

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

|                       |                           |   |      |     |      |
|-----------------------|---------------------------|---|------|-----|------|
| Grading               | Tractors/Loaders/Backhoes | 2 | 8.00 | 97  | 0.37 |
| Paving                | Pavers                    | 2 | 8.00 | 130 | 0.42 |
| Paving                | Paving Equipment          | 2 | 8.00 | 132 | 0.36 |
| Paving                | Rollers                   | 2 | 8.00 | 80  | 0.38 |
| Building Construction | Cranes                    | 1 | 7.00 | 231 | 0.29 |
| Building Construction | Forklifts                 | 3 | 8.00 | 89  | 0.20 |
| Building Construction | Generator Sets            | 1 | 8.00 | 84  | 0.74 |
| Building Construction | Tractors/Loaders/Backhoes | 3 | 7.00 | 97  | 0.37 |
| Building Construction | Welders                   | 1 | 8.00 | 46  | 0.45 |
| Architectural Coating | Air Compressors           | 1 | 6.00 | 78  | 0.48 |

**Trips and VMT**

| Phase Name            | Offroad Equipment Count | Worker Trip Number | Vendor Trip Number | Hauling Trip Number | Worker Trip Length | Vendor Trip Length | Hauling Trip Length | Worker Vehicle Class | Vendor Vehicle Class | Hauling Vehicle Class |
|-----------------------|-------------------------|--------------------|--------------------|---------------------|--------------------|--------------------|---------------------|----------------------|----------------------|-----------------------|
| Site Preparation      | 7                       | 18.00              | 0.00               | 0.00                | 10.80              | 7.30               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Grading               | 8                       | 20.00              | 0.00               | 1,263.00            | 10.80              | 7.30               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Paving                | 6                       | 15.00              | 0.00               | 0.00                | 10.80              | 7.30               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Building Construction | 9                       | 277.00             | 57.00              | 0.00                | 10.80              | 7.30               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Architectural Coating | 1                       | 55.00              | 0.00               | 0.00                | 10.80              | 7.30               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |

**3.1 Mitigation Measures Construction**

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

Jefferson Oceanside Mixed Use Development - San Diego County, Summer

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

### **3.2 Site Preparation - 2023**

## **Unmitigated Construction On-Site**

|               | ROG    | NOx     | CO      | SO2    | Fugitive PM10 | Exhaust PM10 | PM10 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 |        |         |         |        | 19.6570       | 0.0000       | 19.6570    | 10.1025        | 0.0000        | 10.1025     |          |           | 0.0000    |        |     | 0.0000 |            |
| Off-Road      | 2.6595 | 27.5242 | 18.2443 | 0.0381 |               | 1.2660       | 1.2660     |                | 1.1647        | 1.1647      |          | 3,687.308 | 3,687.308 | 1.1926 |     |        | 3,717.1219 |
| Total         | 2.6595 | 27.5242 | 18.2443 | 0.0381 | 19.6570       | 1.2660       | 20.9230    | 10.1025        | 1.1647        | 11.2672     |          | 3,687.308 | 3,687.308 | 1.1926 |     |        | 3,717.1219 |

## **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   | 0.0000 |  |
| Vendor   | 0.0000 | 0.0000 | 0.0000 | 0.0000      | 0.0000        | 0.0000       | 0.0000     | 0.0000         | 0.0000        | 0.0000      | 0.0000   | 0.0000    | 0.0000      | 0.0000      | 0.0000   | 0.0000 |  |
| Worker   | 0.0492 | 0.0306 | 0.4332 | 1.3100e-003 | 0.1479        | 8.0000e-004  | 0.1487     | 0.0392         | 7.3000e-004   | 0.0400      | 133.7136 | 133.7136  | 3.5800e-003 | 3.2900e-003 | 134.7841 |        |  |
| Total    | 0.0492 | 0.0306 | 0.4332 | 1.3100e-003 | 0.1479        | 8.0000e-004  | 0.1487     | 0.0392         | 7.3000e-004   | 0.0400      | 133.7136 | 133.7136  | 3.5800e-003 | 3.2900e-003 | 134.7841 |        |  |

## Jefferson Oceanside Mixed Use Development - San Diego County, Summer

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

|               | ROG    | NOx     | CO      | SO2    | Fugitive PM10 | Exhaust PM10 | PM10 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 |        |         |         |        | 19.6570       | 0.0000       | 19.6570    | 10.1025        | 0.0000        | 10.1025     |          |                | 0.0000         |        |     | 0.0000         |  |
| Off-Road      | 0.9312 | 19.0656 | 22.9600 | 0.0381 |               | 0.1419       | 0.1419     |                | 0.1419        | 0.1419      | 0.0000   | 3,687.308<br>1 | 3,687.308<br>1 | 1.1926 |     | 3,717.121<br>9 |  |
| Total         | 0.9312 | 19.0656 | 22.9600 | 0.0381 | 19.6570       | 0.1419       | 19.7989    | 10.1025        | 0.1419        | 10.2444     | 0.0000   | 3,687.308<br>1 | 3,687.308<br>1 | 1.1926 |     | 3,717.121<br>9 |  |

**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      | 0.0000   |  |
| Vendor   | 0.0000 | 0.0000 | 0.0000 | 0.0000      | 0.0000        | 0.0000       | 0.0000     | 0.0000         | 0.0000        | 0.0000      | 0.0000   | 0.0000    | 0.0000    | 0.0000      | 0.0000      | 0.0000   |  |
| Worker   | 0.0492 | 0.0306 | 0.4332 | 1.3100e-003 | 0.1479        | 8.0000e-004  | 0.1487     | 0.0392         | 7.3000e-004   | 0.0400      |          | 133.7136  | 133.7136  | 3.5800e-003 | 3.2900e-003 | 134.7841 |  |
| Total    | 0.0492 | 0.0306 | 0.4332 | 1.3100e-003 | 0.1479        | 8.0000e-004  | 0.1487     | 0.0392         | 7.3000e-004   | 0.0400      |          | 133.7136  | 133.7136  | 3.5800e-003 | 3.2900e-003 | 134.7841 |  |

## Jefferson Oceanside Mixed Use Development - San Diego County, Summer

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

|               | ROG           | NOx            | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total     | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2              | Total CO2              | CH4           | N2O | CO2e   |                        |
|---------------|---------------|----------------|----------------|---------------|---------------|---------------|----------------|----------------|---------------|---------------|----------|------------------------|------------------------|---------------|-----|--------|------------------------|
| Category      | lb/day        |                |                |               |               |               |                |                |               |               | lb/day   |                        |                        |               |     |        |                        |
| Fugitive Dust |               |                |                |               | 9.2351        | 0.0000        | 9.2351         | 3.6585         | 0.0000        | 3.6585        |          |                        | 0.0000                 |               |     | 0.0000 |                        |
| Off-Road      | 3.3217        | 34.5156        | 28.0512        | 0.0621        |               | 1.4245        | 1.4245         |                | 1.3105        | 1.3105        |          | 6,011.477<br>7         | 6,011.477<br>7         | 1.9442        |     |        | 6,060.083<br>6         |
| <b>Total</b>  | <b>3.3217</b> | <b>34.5156</b> | <b>28.0512</b> | <b>0.0621</b> | <b>9.2351</b> | <b>1.4245</b> | <b>10.6596</b> | <b>3.6585</b>  | <b>1.3105</b> | <b>4.9691</b> |          | <b>6,011.477<br/>7</b> | <b>6,011.477<br/>7</b> | <b>1.9442</b> |     |        | <b>6,060.083<br/>6</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      | 0.0636        | 3.6715        | 1.0086        | 0.0168        | 0.4909        | 0.0312        | 0.5221        | 0.1346         | 0.0298        | 0.1644        |          | 1,855.985<br>1         | 1,855.985<br>1         | 0.0935        | 0.2952        | 1,946.278<br>0         |  |
| 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       | 0.0547        | 0.0340        | 0.4813        | 1.4500e-003   | 0.1643        | 8.8000e-004   | 0.1652        | 0.0436         | 8.1000e-004   | 0.0444        |          | 148.5707               | 148.5707               | 3.9800e-003   | 3.6600e-003   | 149.7602               |  |
| <b>Total</b> | <b>0.1183</b> | <b>3.7055</b> | <b>1.4898</b> | <b>0.0182</b> | <b>0.6552</b> | <b>0.0320</b> | <b>0.6872</b> | <b>0.1781</b>  | <b>0.0306</b> | <b>0.2088</b> |          | <b>2,004.555<br/>8</b> | <b>2,004.555<br/>8</b> | <b>0.0975</b> | <b>0.2988</b> | <b>2,096.038<br/>1</b> |  |

## Jefferson Oceanside Mixed Use Development - San Diego County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied****3.3 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 |        |         |         |        | 9.2351        | 0.0000       | 9.2351     | 3.6585         | 0.0000        | 3.6585      |          |                | 0.0000         |        |     | 0.0000         |  |
| Off-Road      | 1.5231 | 29.9782 | 36.7226 | 0.0621 |               | 0.1949       | 0.1949     |                | 0.1949        | 0.1949      | 0.0000   | 6,011.477<br>7 | 6,011.477<br>7 | 1.9442 |     | 6,060.083<br>6 |  |
| Total         | 1.5231 | 29.9782 | 36.7226 | 0.0621 | 9.2351        | 0.1949       | 9.4300     | 3.6585         | 0.1949        | 3.8534      | 0.0000   | 6,011.477<br>7 | 6,011.477<br>7 | 1.9442 |     | 6,060.083<br>6 |  |

**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  | 0.0636 | 3.6715 | 1.0086 | 0.0168      | 0.4909        | 0.0312       | 0.5221     | 0.1346         | 0.0298        | 0.1644      | 1,855.985<br>1 | 1,855.985<br>1 | 0.0935      | 0.2952      | 1,946.278<br>0 |        |  |
| Vendor   | 0.0000 | 0.0000 | 0.0000 | 0.0000      | 0.0000        | 0.0000       | 0.0000     | 0.0000         | 0.0000        | 0.0000      | 0.0000         | 0.0000         | 0.0000      | 0.0000      | 0.0000         | 0.0000 |  |
| Worker   | 0.0547 | 0.0340 | 0.4813 | 1.4500e-003 | 0.1643        | 8.8000e-004  | 0.1652     | 0.0436         | 8.1000e-004   | 0.0444      | 148.5707       | 148.5707       | 3.9800e-003 | 3.6600e-003 | 149.7602       |        |  |
| Total    | 0.1183 | 3.7055 | 1.4898 | 0.0182      | 0.6552        | 0.0320       | 0.6872     | 0.1781         | 0.0306        | 0.2088      | 2,004.555<br>8 | 2,004.555<br>8 | 0.0975      | 0.2988      | 2,096.038<br>1 |        |  |

## Jefferson Oceanside Mixed Use Development - San Diego County, Summer

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

|              | ROG           | NOx            | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2               | NBio- CO2              | Total CO2     | CH4 | N2O | CO2e                   |
|--------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|------------------------|------------------------|---------------|-----|-----|------------------------|
| Category     | lb/day        |                |                |               |               |               |               |                |               |               | lb/day                 |                        |               |     |     |                        |
| Off-Road     | 1.0327        | 10.1917        | 14.5842        | 0.0228        |               | 0.5102        | 0.5102        |                | 0.4694        | 0.4694        | 2,207.584<br>1         | 2,207.584<br>1         | 0.7140        |     |     | 2,225.433<br>6         |
| Paving       | 0.2523        |                |                |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |                        | 0.0000                 |               |     |     | 0.0000                 |
| <b>Total</b> | <b>1.2850</b> | <b>10.1917</b> | <b>14.5842</b> | <b>0.0228</b> |               | <b>0.5102</b> | <b>0.5102</b> |                | <b>0.4694</b> | <b>0.4694</b> | <b>2,207.584<br/>1</b> | <b>2,207.584<br/>1</b> | <b>0.7140</b> |     |     | <b>2,225.433<br/>6</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 | 0.0000          |
| Vendor       | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        | 0.0000          | 0.0000          | 0.0000             | 0.0000             | 0.0000 | 0.0000          |
| Worker       | 0.0410        | 0.0255        | 0.3610        | 1.0900e-003        | 0.1232        | 6.6000e-004        | 0.1239        | 0.0327         | 6.1000e-004        | 0.0333        | 111.4280        | 111.4280        | 2.9800e-003        | 2.7400e-003        |        | 112.3201        |
| <b>Total</b> | <b>0.0410</b> | <b>0.0255</b> | <b>0.3610</b> | <b>1.0900e-003</b> | <b>0.1232</b> | <b>6.6000e-004</b> | <b>0.1239</b> | <b>0.0327</b>  | <b>6.1000e-004</b> | <b>0.0333</b> | <b>111.4280</b> | <b>111.4280</b> | <b>2.9800e-003</b> | <b>2.7400e-003</b> |        | <b>112.3201</b> |

## Jefferson Oceanside Mixed Use Development - San Diego County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied****3.4 Paving - 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     | 0.5609        | 11.2952        | 17.2957        | 0.0228        |               | 0.0914        | 0.0914        |                | 0.0914        | 0.0914        | 0.0000        | 2,207.584        | 2,207.584        | 0.7140        |     | 2,225.433        |
| Paving       | 0.2523        |                |                |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |               |                  | 0.0000           |               |     | 0.0000           |
| <b>Total</b> | <b>0.8132</b> | <b>11.2952</b> | <b>17.2957</b> | <b>0.0228</b> |               | <b>0.0914</b> | <b>0.0914</b> |                | <b>0.0914</b> | <b>0.0914</b> | <b>0.0000</b> | <b>2,207.584</b> | <b>2,207.584</b> | <b>0.7140</b> |     | <b>2,225.433</b> |
|              |               |                |                |               |               |               |               |                |               |               |               |                  |                  |               |     | <b>6</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             | 0.0000          |
| Vendor       | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        | 0.0000   | 0.0000          | 0.0000          | 0.0000             | 0.0000             | 0.0000          |
| Worker       | 0.0410        | 0.0255        | 0.3610        | 1.0900e-003        | 0.1232        | 6.6000e-004        | 0.1239        | 0.0327         | 6.1000e-004        | 0.0333        |          | 111.4280        | 111.4280        | 2.9800e-003        | 2.7400e-003        | 112.3201        |
| <b>Total</b> | <b>0.0410</b> | <b>0.0255</b> | <b>0.3610</b> | <b>1.0900e-003</b> | <b>0.1232</b> | <b>6.6000e-004</b> | <b>0.1239</b> | <b>0.0327</b>  | <b>6.1000e-004</b> | <b>0.0333</b> |          | <b>111.4280</b> | <b>111.4280</b> | <b>2.9800e-003</b> | <b>2.7400e-003</b> | <b>112.3201</b> |

## Jefferson Oceanside Mixed Use Development - San Diego County, Summer

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

|              | ROG           | NOx            | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2       | NBio- CO2              | Total CO2              | CH4           | N2O | CO2e           |                        |
|--------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------------|------------------------|------------------------|---------------|-----|----------------|------------------------|
| Category     | lb/day        |                |                |               |               |               |               |                |               |               | lb/day         |                        |                        |               |     |                |                        |
| Off-Road     | 1.5728        | 14.3849        | 16.2440        | 0.0269        |               | 0.6997        | 0.6997        |                | 0.6584        | 0.6584        | 2,555.209<br>9 | 2,555.209<br>9         | 0.6079                 |               |     | 2,570.406<br>1 |                        |
| <b>Total</b> | <b>1.5728</b> | <b>14.3849</b> | <b>16.2440</b> | <b>0.0269</b> |               | <b>0.6997</b> | <b>0.6997</b> |                | <b>0.6584</b> | <b>0.6584</b> |                | <b>2,555.209<br/>9</b> | <b>2,555.209<br/>9</b> | <b>0.6079</b> |     |                | <b>2,570.406<br/>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        | 0.0000         |                        |
| Vendor       | 0.0681        | 2.4435        | 0.8806        | 0.0117        | 0.3860        | 0.0149        | 0.4009        | 0.1111         | 0.0142        | 0.1254        | 1,259.967<br>6 | 1,259.967<br>6         | 0.0382                 | 0.1824        |               | 1,315.287<br>5 |                        |
| Worker       | 0.7575        | 0.4704        | 6.6656        | 0.0201        | 2.2755        | 0.0122        | 2.2877        | 0.6036         | 0.0113        | 0.6148        | 2,057.704<br>3 | 2,057.704<br>3         | 0.0551                 | 0.0507        |               | 2,074.178<br>1 |                        |
| <b>Total</b> | <b>0.8256</b> | <b>2.9139</b> | <b>7.5462</b> | <b>0.0318</b> | <b>2.6615</b> | <b>0.0271</b> | <b>2.6887</b> | <b>0.7147</b>  | <b>0.0255</b> | <b>0.7402</b> |                | <b>3,317.671<br/>9</b> | <b>3,317.671<br/>9</b> | <b>0.0933</b> | <b>0.2331</b> |                | <b>3,389.465<br/>6</b> |

## Jefferson Oceanside Mixed Use Development - San Diego County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied****3.5 Building 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     | 0.6739        | 14.2261        | 17.8738        | 0.0269        |               | 0.1355        | 0.1355        |                | 0.1355        | 0.1355        | 0.0000        | 2,555.209<br>9         | 2,555.209<br>9         | 0.6079        |     | 2,570.406<br>1         |  |
| <b>Total</b> | <b>0.6739</b> | <b>14.2261</b> | <b>17.8738</b> | <b>0.0269</b> |               | <b>0.1355</b> | <b>0.1355</b> |                | <b>0.1355</b> | <b>0.1355</b> | <b>0.0000</b> | <b>2,555.209<br/>9</b> | <b>2,555.209<br/>9</b> | <b>0.6079</b> |     | <b>2,570.406<br/>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        | 0.0000                 |  |
| Vendor       | 0.0681        | 2.4435        | 0.8806        | 0.0117        | 0.3860        | 0.0149        | 0.4009        | 0.1111         | 0.0142        | 0.1254        |          | 1,259.967<br>6         | 1,259.967<br>6         | 0.0382        | 0.1824        | 1,315.287<br>5         |  |
| Worker       | 0.7575        | 0.4704        | 6.6656        | 0.0201        | 2.2755        | 0.0122        | 2.2877        | 0.6036         | 0.0113        | 0.6148        |          | 2,057.704<br>3         | 2,057.704<br>3         | 0.0551        | 0.0507        | 2,074.178<br>1         |  |
| <b>Total</b> | <b>0.8256</b> | <b>2.9139</b> | <b>7.5462</b> | <b>0.0318</b> | <b>2.6615</b> | <b>0.0271</b> | <b>2.6887</b> | <b>0.7147</b>  | <b>0.0255</b> | <b>0.7402</b> |          | <b>3,317.671<br/>9</b> | <b>3,317.671<br/>9</b> | <b>0.0933</b> | <b>0.2331</b> | <b>3,389.465<br/>6</b> |  |

## Jefferson Oceanside Mixed Use Development - San Diego County, Summer

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

|          | ROG    | NOx     | CO      | SO2    | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4    | N2O | CO2e      |  |
|----------|--------|---------|---------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|--------|-----|-----------|--|
| Category | lb/day |         |         |        |               |              |            |                |               |             |          |           |           |        |     | lb/day    |  |
| Off-Road | 1.4716 | 13.4438 | 16.1668 | 0.0270 |               | 0.6133       | 0.6133     |                | 0.5769        | 0.5769      |          | 2,555.698 | 2,555.698 | 0.6044 |     | 2,570.807 |  |
| Total    | 1.4716 | 13.4438 | 16.1668 | 0.0270 |               | 0.6133       | 0.6133     |                | 0.5769        | 0.5769      |          | 2,555.698 | 2,555.698 | 0.6044 |     | 2,570.807 |  |
|          |        |         |         |        |               |              |            |                |               |             |          | 9         | 9         |        |     | 7         |  |

**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    | 0.0000 |  |
| Vendor   | 0.0656 | 2.4268 | 0.8600 | 0.0115 | 0.3861        | 0.0150       | 0.4010     | 0.1111         | 0.0143        | 0.1255      | 1,238.000 | 1,238.000 | 0.0391    | 0.1792 | 1,292.391 |        |  |
| Worker   | 0.7115 | 0.4232 | 6.2290 | 0.0194 | 2.2755        | 0.0117       | 2.2872     | 0.6036         | 0.0107        | 0.6143      | 2,005.917 | 2,005.917 | 0.0501    | 0.0473 | 2,021.278 |        |  |
| Total    | 0.7771 | 2.8500 | 7.0890 | 0.0309 | 2.6615        | 0.0266       | 2.6882     | 0.7147         | 0.0251        | 0.7398      | 3,243.917 | 3,243.917 | 0.0892    | 0.2266 | 3,313.669 |        |  |
|          |        |        |        |        |               |              |            |                |               |             | 5         | 5         |           |        |           | 9      |  |

## Jefferson Oceanside Mixed Use Development - San Diego County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied****3.5 Building 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 | 0.6739 | 14.2261 | 17.8738 | 0.0270 |               | 0.1355       | 0.1355     |                | 0.1355        | 0.1355      | 0.0000   | 2,555.698 | 2,555.698 | 0.6044 |     | 2,570.807 |
| Total    | 0.6739 | 14.2261 | 17.8738 | 0.0270 |               | 0.1355       | 0.1355     |                | 0.1355        | 0.1355      | 0.0000   | 2,555.698 | 2,555.698 | 0.6044 |     | 2,570.807 |

**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    | 0.0000 |
| Vendor   | 0.0656 | 2.4268 | 0.8600 | 0.0115 | 0.3861        | 0.0150       | 0.4010     | 0.1111         | 0.0143        | 0.1255      | 1,238.000 | 1,238.000 | 0.0391    | 0.1792 | 1,292.391 | 2      |
| Worker   | 0.7115 | 0.4232 | 6.2290 | 0.0194 | 2.2755        | 0.0117       | 2.2872     | 0.6036         | 0.0107        | 0.6143      | 2,005.917 | 2,005.917 | 0.0501    | 0.0473 | 2,021.278 | 7      |
| Total    | 0.7771 | 2.8500 | 7.0890 | 0.0309 | 2.6615        | 0.0266       | 2.6882     | 0.7147         | 0.0251        | 0.7398      | 3,243.917 | 3,243.917 | 0.0892    | 0.2266 | 3,313.669 | 9      |

Jefferson Oceanside Mixed Use Development - San Diego County, Summer

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

### **3.5 Building Construction - 2025**

## **Unmitigated Construction On-Site**

|          | ROG    | NOx     | CO      | SO2    | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2  | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e      |  |
|----------|--------|---------|---------|--------|---------------|--------------|------------|----------------|---------------|-------------|-----------|-----------|-----------|-----|-----|-----------|--|
| Category | lb/day |         |         |        |               |              |            |                |               |             | lb/day    |           |           |     |     |           |  |
| Off-Road | 1.3674 | 12.4697 | 16.0847 | 0.0270 |               | 0.5276       | 0.5276     |                | 0.4963        | 0.4963      | 2,556.474 | 2,556.474 | 0.6010    |     |     | 2,571.498 |  |
| Total    | 1.3674 | 12.4697 | 16.0847 | 0.0270 |               | 0.5276       | 0.5276     |                | 0.4963        | 0.4963      | 2,556.474 | 2,556.474 | 0.6010    |     |     | 2,571.498 |  |

## **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     | 0.0000 |  |
| Vendor   | 0.0636 | 2.4029 | 0.8455 | 0.0112 | 0.3861        | 0.0149       | 0.4010     | 0.1111         | 0.0143        | 0.1254      | 1,214.3840 | 1,214.3840 | 0.0401    | 0.1757 | 1,267.7541 |        |  |
| Worker   | 0.6704 | 0.3832 | 5.8434 | 0.0188 | 2.2755        | 0.0112       | 2.2867     | 0.6036         | 0.0103        | 0.6139      | 1,956.7398 | 1,956.7398 | 0.0457    | 0.0444 | 1,971.1254 |        |  |
| Total    | 0.7340 | 2.7862 | 6.6890 | 0.0300 | 2.6615        | 0.0261       | 2.6876     | 0.7147         | 0.0246        | 0.7393      | 3,171.1238 | 3,171.1238 | 0.0857    | 0.2202 | 3,238.8795 |        |  |

## Jefferson Oceanside Mixed Use Development - San Diego County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied****3.5 Building Construction - 2025****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 | 0.6739 | 14.2261 | 17.8738 | 0.0270 |               | 0.1355       | 0.1355     |                | 0.1355        | 0.1355      | 0.0000   | 2,556.474 | 2,556.474 | 0.6010 |     | 2,571.498 |  |
| Total    | 0.6739 | 14.2261 | 17.8738 | 0.0270 |               | 0.1355       | 0.1355     |                | 0.1355        | 0.1355      | 0.0000   | 2,556.474 | 2,556.474 | 0.6010 |     | 2,571.498 |  |

**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    | 0.0000 |  |
| Vendor   | 0.0636 | 2.4029 | 0.8455 | 0.0112 | 0.3861        | 0.0149       | 0.4010     | 0.1111         | 0.0143        | 0.1254      | 1,214.384 | 1,214.384 | 0.0401    | 0.1757 | 1,267.754 | 1      |  |
| Worker   | 0.6704 | 0.3832 | 5.8434 | 0.0188 | 2.2755        | 0.0112       | 2.2867     | 0.6036         | 0.0103        | 0.6139      | 1,956.739 | 1,956.739 | 0.0457    | 0.0444 | 1,971.125 | 4      |  |
| Total    | 0.7340 | 2.7862 | 6.6890 | 0.0300 | 2.6615        | 0.0261       | 2.6876     | 0.7147         | 0.0246        | 0.7393      | 3,171.123 | 3,171.123 | 0.0857    | 0.2202 | 3,238.879 | 5      |  |

## Jefferson Oceanside Mixed Use Development - San Diego County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied****3.6 Architectural Coating - 2025****Unmitigated Construction On-Site**

|                 | ROG            | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10 | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2 | Total CO2       | CH4             | N2O           | CO2e   |                 |
|-----------------|----------------|---------------|---------------|--------------------|---------------|--------------|---------------|----------------|---------------|---------------|---------------|-----------|-----------------|-----------------|---------------|--------|-----------------|
| Category        | lb/day         |               |               |                    |               |              |               |                |               |               | lb/day        |           |                 |                 |               |        |                 |
| Archit. Coating | 61.6607        |               |               |                    |               |              | 0.0000        | 0.0000         |               | 0.0000        |               |           | 0.0000          |                 |               | 0.0000 |                 |
| Off-Road        | 0.1709         | 1.1455        | 1.8091        | 2.9700e-003        |               |              | 0.0515        | 0.0515         |               | 0.0515        | 0.0515        |           | 281.4481        | 281.4481        | 0.0154        |        | 281.8319        |
| <b>Total</b>    | <b>61.8316</b> | <b>1.1455</b> | <b>1.8091</b> | <b>2.9700e-003</b> |               |              | <b>0.0515</b> | <b>0.0515</b>  |               | <b>0.0515</b> | <b>0.0515</b> |           | <b>281.4481</b> | <b>281.4481</b> | <b>0.0154</b> |        | <b>281.8319</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             |                 |
| 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             |                 |
| Worker       | 0.1331        | 0.0761        | 1.1602        | 3.7300e-003        | 0.4518        | 2.2200e-003        | 0.4540        | 0.1198         | 2.0400e-003        | 0.1219        |          |           | 388.5223        | 388.5223        | 9.0700e-003        | 8.8200e-003        | 391.3787        |
| <b>Total</b> | <b>0.1331</b> | <b>0.0761</b> | <b>1.1602</b> | <b>3.7300e-003</b> | <b>0.4518</b> | <b>2.2200e-003</b> | <b>0.4540</b> | <b>0.1198</b>  | <b>2.0400e-003</b> | <b>0.1219</b> |          |           | <b>388.5223</b> | <b>388.5223</b> | <b>9.0700e-003</b> | <b>8.8200e-003</b> | <b>391.3787</b> |

## Jefferson Oceanside Mixed Use Development - San Diego County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied****3.6 Architectural Coating - 2025****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 | 61.6607        |               |               |                    |               |              | 0.0000        | 0.0000         |               | 0.0000        |               |               | 0.0000          |                 |               | 0.0000 |                 |
| Off-Road        | 0.0594         | 1.3570        | 1.8324        | 2.9700e-003        |               |              | 0.0143        | 0.0143         |               | 0.0143        | 0.0143        | 0.0000        | 281.4481        | 281.4481        | 0.0154        |        | 281.8319        |
| <b>Total</b>    | <b>61.7201</b> | <b>1.3570</b> | <b>1.8324</b> | <b>2.9700e-003</b> |               |              | <b>0.0143</b> | <b>0.0143</b>  |               | <b>0.0143</b> | <b>0.0143</b> | <b>0.0000</b> | <b>281.4481</b> | <b>281.4481</b> | <b>0.0154</b> |        | <b>281.8319</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             |                 |
| 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             |                 |
| Worker       | 0.1331        | 0.0761        | 1.1602        | 3.7300e-003        | 0.4518        | 2.2200e-003        | 0.4540        | 0.1198         | 2.0400e-003        | 0.1219        |          |           | 388.5223        | 388.5223        | 9.0700e-003        | 8.8200e-003        | 391.3787        |
| <b>Total</b> | <b>0.1331</b> | <b>0.0761</b> | <b>1.1602</b> | <b>3.7300e-003</b> | <b>0.4518</b> | <b>2.2200e-003</b> | <b>0.4540</b> | <b>0.1198</b>  | <b>2.0400e-003</b> | <b>0.1219</b> |          |           | <b>388.5223</b> | <b>388.5223</b> | <b>9.0700e-003</b> | <b>8.8200e-003</b> | <b>391.3787</b> |

## Jefferson Oceanside Mixed Use Development - San Diego 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   | 7.0031 | 4.8774 | 43.1809 | 0.0765 | 8.2379        | 0.0635       | 8.3013     | 2.1943         | 0.0591        | 2.2534      | 8,048.581 | 8,048.581 | 0.7288    | 0.4368 | 8,196.973 | 1    |  |
| Unmitigated | 7.0031 | 4.8774 | 43.1809 | 0.0765 | 8.2379        | 0.0635       | 8.3013     | 2.1943         | 0.0591        | 2.2534      | 8,048.581 | 8,048.581 | 0.7288    | 0.4368 | 8,196.973 | 1    |  |

**4.2 Trip Summary Information**

| Land Use                            | Average Daily Trip Rate |          |          | Unmitigated |            | Mitigated  |            |
|-------------------------------------|-------------------------|----------|----------|-------------|------------|------------|------------|
|                                     | Weekday                 | Saturday | Sunday   | Annual VMT  | Annual VMT | Annual VMT | Annual VMT |
| Apartments Mid Rise                 | 1,770.00                | 1,770.00 | 1770.00  | 3,814,138   | 3,814,138  | 3,814,138  | 3,814,138  |
| Fast Food Restaurant w/o Drive Thru | 2,100.00                | 2,100.00 | 2100.00  | 99,372      | 99,372     | 99,372     | 99,372     |
| Parking Lot                         | 0.00                    | 0.00     | 0.00     |             |            |            |            |
| Total                               | 3,870.00                | 3,870.00 | 3,870.00 | 3,913,510   | 3,913,510  | 3,913,510  | 3,913,510  |

**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 |
| Apartments Mid Rise            | 5.92       | 0.00       | 0.00        | 100.00     | 0.00       | 0.00        | 100            | 0        | 0       |
| Fast Food Restaurant w/o Drive | 0.00       | 0.13       | 0.00        | 0.00       | 100.00     | 0.00        | 100            | 0        | 0       |
| Parking Lot                    | 9.50       | 7.30       | 7.30        | 0.00       | 0.00       | 0.00        | 0              | 0        | 0       |

## Jefferson Oceanside Mixed Use Development - San Diego 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       |
|-------------------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Apartments Mid Rise                 | 0.565387 | 0.062253 | 0.175474 | 0.116234 | 0.023574 | 0.006359 | 0.009156 | 0.006316 | 0.000699 | 0.000586 | 0.028465 | 0.000937 | 0.004559 |
| Fast Food Restaurant w/o Drive Thru | 0.565387 | 0.062253 | 0.175474 | 0.116234 | 0.023574 | 0.006359 | 0.009156 | 0.006316 | 0.000699 | 0.000586 | 0.028465 | 0.000937 | 0.004559 |
| Parking Lot                         | 0.565387 | 0.062253 | 0.175474 | 0.116234 | 0.023574 | 0.006359 | 0.009156 | 0.006316 | 0.000699 | 0.000586 | 0.028465 | 0.000937 | 0.004559 |

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

Install High Efficiency Lighting

|                        | ROG    | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4    | N2O      | CO2e |
|------------------------|--------|--------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|--------|----------|------|
| Category               | lb/day |        |        |             |               |              |            |                |               |             | lb/day   |           |           |        |          |      |
| NaturalGas Mitigated   | 0.0788 | 0.6822 | 0.3484 | 4.3000e-003 |               | 0.0545       | 0.0545     |                | 0.0545        | 0.0545      | 860.1111 | 860.1111  | 0.0165    | 0.0158 | 865.2223 |      |
| NaturalGas Unmitigated | 0.0788 | 0.6822 | 0.3484 | 4.3000e-003 |               | 0.0545       | 0.0545     |                | 0.0545        | 0.0545      | 860.1111 | 860.1111  | 0.0165    | 0.0158 | 865.2223 |      |

## Jefferson Oceanside Mixed Use Development - San Diego 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          |                 |               |               |                 |      |
| Apartments Mid Rise                 | 5880.64        | 0.0634        | 0.5419        | 0.2306        | 3.4600e-003        |               | 0.0438        | 0.0438        |                | 0.0438        | 0.0438        | 691.8404        | 691.8404        | 0.0133        | 0.0127        | 695.9516        |      |
| Fast Food Restaurant w/o Drive Thru | 1430.3         | 0.0154        | 0.1402        | 0.1178        | 8.4000e-004        |               | 0.0107        | 0.0107        |                | 0.0107        | 0.0107        | 168.2708        | 168.2708        | 3.2300e-003   | 3.0800e-003   | 169.2707        |      |
| 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>0.0788</b> | <b>0.6822</b> | <b>0.3484</b> | <b>4.3000e-003</b> |               | <b>0.0545</b> | <b>0.0545</b> |                | <b>0.0545</b> | <b>0.0545</b> | <b>860.1111</b> | <b>860.1111</b> | <b>0.0165</b> | <b>0.0158</b> | <b>865.2223</b> |      |

## Jefferson Oceanside Mixed Use Development - San Diego 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          |                 |               |               |                 |      |
| Apartments Mid Rise                 | 5.88064        | 0.0634        | 0.5419        | 0.2306        | 3.4600e-003        |               | 0.0438        | 0.0438        |                | 0.0438        | 0.0438        | 691.8404        | 691.8404        | 0.0133        | 0.0127        | 695.9516        |      |
| Fast Food Restaurant w/o Drive Thru | 1.4303         | 0.0154        | 0.1402        | 0.1178        | 8.4000e-004        |               | 0.0107        | 0.0107        |                | 0.0107        | 0.0107        | 168.2708        | 168.2708        | 3.2300e-003   | 3.0800e-003   | 169.2707        |      |
| 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>0.0788</b> | <b>0.6822</b> | <b>0.3484</b> | <b>4.3000e-003</b> |               | <b>0.0545</b> | <b>0.0545</b> |                | <b>0.0545</b> | <b>0.0545</b> | <b>860.1111</b> | <b>860.1111</b> | <b>0.0165</b> | <b>0.0158</b> | <b>865.2223</b> |      |

**6.0 Area Detail****6.1 Mitigation Measures Area**

No Hearths Installed

## Jefferson Oceanside Mixed Use Development - San Diego 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   | 8.1944 | 0.2804 | 24.3533 | 1.2900e-003 |               | 0.1351       | 0.1351     |                | 0.1351        | 0.1351      | 0.0000   | 43.9057   | 43.9057   | 0.0422 | 0.0000 | 44.9602 |  |
| Unmitigated | 8.1944 | 0.2804 | 24.3533 | 1.2900e-003 |               | 0.1351       | 0.1351     |                | 0.1351        | 0.1351      | 0.0000   | 43.9057   | 43.9057   | 0.0422 | 0.0000 | 44.9602 |  |

**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 | 1.0305 |        |         |             |               | 0.0000       | 0.0000     |                | 0.0000        | 0.0000      | 0.0000   |           |           |        |        | 0.0000  |  |
| Consumer Products     | 6.4303 |        |         |             |               | 0.0000       | 0.0000     |                | 0.0000        | 0.0000      | 0.0000   |           |           |        |        | 0.0000  |  |
| Hearth                | 0.0000 | 0.0000 | 0.0000  | 0.0000      |               | 0.0000       | 0.0000     |                | 0.0000        | 0.0000      | 0.0000   |           |           |        |        | 0.0000  |  |
| Landscaping           | 0.7336 | 0.2804 | 24.3533 | 1.2900e-003 |               | 0.1351       | 0.1351     |                | 0.1351        | 0.1351      | 0.0000   | 43.9057   | 43.9057   | 0.0422 |        | 44.9602 |  |
| Total                 | 8.1944 | 0.2804 | 24.3533 | 1.2900e-003 |               | 0.1351       | 0.1351     |                | 0.1351        | 0.1351      | 0.0000   | 43.9057   | 43.9057   | 0.0422 | 0.0000 | 44.9602 |  |

## Jefferson Oceanside Mixed Use Development - San Diego 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 | 1.0305        |               |                |                    |               |              | 0.0000        | 0.0000         |               | 0.0000        | 0.0000        |           | 0.0000        |                |                | 0.0000        |               |                |
| Consumer Products     | 6.4303        |               |                |                    |               |              | 0.0000        | 0.0000         |               | 0.0000        | 0.0000        |           | 0.0000        |                |                | 0.0000        |               |                |
| Hearth                | 0.0000        | 0.0000        | 0.0000         | 0.0000             |               |              | 0.0000        | 0.0000         |               | 0.0000        | 0.0000        |           | 0.0000        | 0.0000         | 0.0000         | 0.0000        |               |                |
| Landscaping           | 0.7336        | 0.2804        | 24.3533        | 1.2900e-003        |               |              | 0.1351        | 0.1351         |               | 0.1351        | 0.1351        |           | 43.9057       | 43.9057        | 0.0422         |               | 44.9602       |                |
| <b>Total</b>          | <b>8.1944</b> | <b>0.2804</b> | <b>24.3533</b> | <b>1.2900e-003</b> |               |              | <b>0.1351</b> | <b>0.1351</b>  |               | <b>0.1351</b> | <b>0.1351</b> |           | <b>0.0000</b> | <b>43.9057</b> | <b>43.9057</b> | <b>0.0422</b> | <b>0.0000</b> | <b>44.9602</b> |

**7.0 Water Detail****7.1 Mitigation Measures Water**

Apply Water Conservation Strategy

## Jefferson Oceanside Mixed Use Development - San Diego 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**

Institute Recycling and Composting Services

**9.0 Operational Offroad**

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

**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 |
|----------------|--------|----------------|-----------------|---------------|-----------|
|----------------|--------|----------------|-----------------|---------------|-----------|

**User Defined Equipment**

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

**11.0 Vegetation**

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## Jefferson Oceanside Mixed Use Development - San Diego County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied****Jefferson Oceanside Mixed Use Development**

San Diego County, Winter

**1.0 Project Characteristics****1.1 Land Usage**

| Land Uses                           | Size   | Metric        | Lot Acreage | Floor Surface Area | Population |
|-------------------------------------|--------|---------------|-------------|--------------------|------------|
| Parking Lot                         | 375.00 | Space         | 3.37        | 150,000.00         | 0          |
| Fast Food Restaurant w/o Drive Thru | 3.00   | 1000sqft      | 0.07        | 3,000.00           | 0          |
| Apartments Mid Rise                 | 295.00 | Dwelling Unit | 15.48       | 295,000.00         | 844        |

**1.2 Other Project Characteristics**

|                            |                          |                            |       |                            |       |
|----------------------------|--------------------------|----------------------------|-------|----------------------------|-------|
| Urbanization               | Urban                    | Wind Speed (m/s)           | 2.6   | Precipitation Freq (Days)  | 40    |
| Climate Zone               | 13                       |                            |       | Operational Year           | 2026  |
| Utility Company            | San Diego Gas & Electric |                            |       |                            |       |
| CO2 Intensity<br>(lb/MWhr) | 409.42                   | CH4 Intensity<br>(lb/MWhr) | 0.025 | N2O Intensity<br>(lb/MWhr) | 0.003 |

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

## Project Characteristics - RPS 2026

Land Use - Project Site is 18.85 acres - Developed Area is 9.91 Acres. Total Parking is 91 Garage Spaces within facility footprint and 375 parking space outside facility footprint made up of carports and surface parking

Construction Phase - Construction Schedule

Off-road Equipment -

Trips and VMT -

Grading -

Architectural Coating - Rule 67 Paint

Vehicle Trips - Trip Generation and VMT from Project Traffic Study.

Vehicle Emission Factors -

## Jefferson Oceanside Mixed Use Development - San Diego County, Winter

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

Vehicle Emission Factors -

Vehicle Emission Factors -

Woodstoves - No hearth options

Area Coating - Rule 67 Paint

Energy Use -

Solid Waste -

Construction Off-road Equipment Mitigation - T3 with DPF

Mobile Land Use Mitigation -

Area Mitigation -

Energy Mitigation -

Water Mitigation -

Waste Mitigation -

Fleet Mix -

| Table Name              | Column Name                     | Default Value | New Value |
|-------------------------|---------------------------------|---------------|-----------|
| tblArchitecturalCoating | EF_Nonresidential_Exterior      | 250.00        | 100.00    |
| tblArchitecturalCoating | EF_Nonresidential_Interior      | 250.00        | 100.00    |
| tblArchitecturalCoating | EF_Parking                      | 250.00        | 100.00    |
| tblArchitecturalCoating | EF_Residential_Exterior         | 250.00        | 100.00    |
| tblArchitecturalCoating | EF_Residential_Interior         | 250.00        | 100.00    |
| tblAreaCoating          | Area_EF_Nonresidential_Exterior | 250           | 100       |
| tblAreaCoating          | Area_EF_Nonresidential_Interior | 250           | 100       |
| tblAreaCoating          | Area_EF_Parking                 | 250           | 100       |
| tblAreaCoating          | Area_EF_Residential_Exterior    | 250           | 100       |
| tblAreaCoating          | Area_EF_Residential_Interior    | 250           | 100       |
| tblConstEquipMitigation | DPF                             | No Change     | Level 3   |
| tblConstEquipMitigation | DPF                             | No Change     | Level 3   |
| tblConstEquipMitigation | DPF                             | No Change     | Level 3   |
| tblConstEquipMitigation | DPF                             | No Change     | Level 3   |

Jefferson Oceanside Mixed Use Development - San Diego County, Winter

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

## Jefferson Oceanside Mixed Use Development - San Diego 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    |
| tblConstructionPhase      | NumDays            | 20.00     | 61.00     |
| tblConstructionPhase      | NumDays            | 300.00    | 440.00    |
| tblConstructionPhase      | NumDays            | 30.00     | 45.00     |
| tblConstructionPhase      | NumDays            | 20.00     | 35.00     |
| tblConstructionPhase      | NumDays            | 10.00     | 20.00     |
| tblFireplaces             | NumberGas          | 162.25    | 0.00      |
| tblFireplaces             | NumberNoFireplace  | 29.50     | 0.00      |
| tblFireplaces             | NumberWood         | 103.25    | 0.00      |
| tblGrading                | MaterialExported   | 0.00      | 10,100.00 |
| tblLandUse                | LotAcreage         | 7.76      | 15.48     |
| tblProjectCharacteristics | CH4IntensityFactor | 0.033     | 0.025     |
| tblProjectCharacteristics | CO2IntensityFactor | 539.98    | 409.42    |
| tblProjectCharacteristics | N2OIntensityFactor | 0.004     | 0.003     |
| tblVehicleTrips           | CC_TL              | 7.30      | 0.13      |
| tblVehicleTrips           | CC_TTP             | 79.50     | 100.00    |
| tblVehicleTrips           | CNW_TL             | 7.30      | 0.00      |
| tblVehicleTrips           | CNW_TTP            | 19.00     | 0.00      |
| tblVehicleTrips           | CW_TL              | 9.50      | 0.00      |
| tblVehicleTrips           | CW_TTP             | 1.50      | 0.00      |
| tblVehicleTrips           | DV_TP              | 11.00     | 0.00      |
| tblVehicleTrips           | DV_TP              | 37.00     | 0.00      |
| tblVehicleTrips           | HO_TL              | 7.50      | 0.00      |
| tblVehicleTrips           | HO_TTP             | 39.60     | 0.00      |

## Jefferson Oceanside Mixed Use Development - San Diego County, Winter

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

|                 |                    |        |        |
|-----------------|--------------------|--------|--------|
| tblVehicleTrips | HS_TL              | 7.30   | 0.00   |
| tblVehicleTrips | HS_TTP             | 18.80  | 0.00   |
| tblVehicleTrips | HW_TL              | 10.80  | 5.92   |
| tblVehicleTrips | HW_TTP             | 41.60  | 100.00 |
| tblVehicleTrips | PB_TP              | 3.00   | 0.00   |
| tblVehicleTrips | PB_TP              | 12.00  | 0.00   |
| tblVehicleTrips | PR_TP              | 86.00  | 100.00 |
| tblVehicleTrips | PR_TP              | 51.00  | 100.00 |
| tblVehicleTrips | ST_TR              | 4.91   | 6.00   |
| tblVehicleTrips | ST_TR              | 696.00 | 700.00 |
| tblVehicleTrips | SU_TR              | 4.09   | 6.00   |
| tblVehicleTrips | SU_TR              | 500.00 | 700.00 |
| tblVehicleTrips | WD_TR              | 5.44   | 6.00   |
| tblVehicleTrips | WD_TR              | 346.23 | 700.00 |
| tblWoodstoves   | NumberCatalytic    | 14.75  | 0.00   |
| tblWoodstoves   | NumberNoncatalytic | 14.75  | 0.00   |

**2.0 Emissions Summary**

## Jefferson Oceanside Mixed Use Development - San Diego 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    | 3.4408  | 38.3734 | 29.5296 | 0.0803 | 19.8049       | 1.4566       | 21.0717    | 10.1417        | 1.3412        | 11.3071     | 0.0000   | 8,009.670<br>4 | 8,009.670<br>4 | 2.0418 | 0.2994 | 8,149.937<br>3 |  |
| 2024    | 2.3086  | 16.4488 | 22.9839 | 0.0568 | 2.6615        | 0.6400       | 3.3015     | 0.7147         | 0.6020        | 1.3167      | 0.0000   | 5,691.410<br>8 | 5,691.410<br>8 | 0.6967 | 0.2309 | 5,777.622<br>5 |  |
| 2025    | 64.1358 | 16.6363 | 25.4441 | 0.0624 | 3.1134        | 0.6074       | 3.7208     | 0.8346         | 0.5744        | 1.4090      | 0.0000   | 6,271.005<br>2 | 6,271.005<br>2 | 0.7147 | 0.2337 | 6,358.523<br>0 |  |
| Maximum | 64.1358 | 38.3734 | 29.5296 | 0.0803 | 19.8049       | 1.4566       | 21.0717    | 10.1417        | 1.3412        | 11.3071     | 0.0000   | 8,009.670<br>4 | 8,009.670<br>4 | 2.0418 | 0.2994 | 8,149.937<br>3 |  |

**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    | 1.6421  | 33.8360 | 38.2011 | 0.0803 | 19.8049       | 0.2270       | 19.9476    | 10.1417        | 0.2256        | 10.2843     | 0.0000   | 8,009.670<br>4 | 8,009.670<br>4 | 2.0418 | 0.2994 | 8,149.937<br>3 |  |
| 2024    | 1.5109  | 17.2311 | 24.6908 | 0.0568 | 2.6615        | 0.1622       | 2.8238     | 0.7147         | 0.1607        | 0.8754      | 0.0000   | 5,691.410<br>8 | 5,691.410<br>8 | 0.6967 | 0.2309 | 5,777.622<br>5 |  |
| 2025    | 63.3309 | 18.6041 | 27.2564 | 0.0624 | 3.1134        | 0.1782       | 3.2915     | 0.8346         | 0.1765        | 1.0110      | 0.0000   | 6,271.005<br>2 | 6,271.005<br>2 | 0.7147 | 0.2337 | 6,358.523<br>0 |  |
| Maximum | 63.3309 | 33.8360 | 38.2011 | 0.0803 | 19.8049       | 0.2270       | 19.9476    | 10.1417        | 0.2256        | 10.2843     | 0.0000   | 8,009.670<br>4 | 8,009.670<br>4 | 2.0418 | 0.2994 | 8,149.937<br>3 |  |

## Jefferson Oceanside Mixed Use Development - San Diego 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  | N20  | CO2e |
|-------------------|------|------|--------|------|---------------|--------------|------------|----------------|---------------|-------------|----------|----------|-----------|------|------|------|
| Percent Reduction | 4.87 | 2.50 | -15.64 | 0.00 | 0.00          | 79.02        | 7.23       | 0.00           | 77.65         | 13.27       | 0.00     | 0.00     | 0.00      | 0.00 | 0.00 | 0.00 |

## Jefferson Oceanside Mixed Use Development - San Diego 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         | 8.1944         | 0.2804        | 24.3533        | 1.2900e-003   |               | 0.1351        | 0.1351        |                | 0.1351        | 0.1351        | 0.0000        | 43.9057           | 43.9057           | 0.0422        | 0.0000        | 44.9602           |
| Energy       | 0.0788         | 0.6822        | 0.3484         | 4.3000e-003   |               | 0.0545        | 0.0545        |                | 0.0545        | 0.0545        |               | 860.1111          | 860.1111          | 0.0165        | 0.0158        | 865.2223          |
| Mobile       | 6.6460         | 5.3122        | 46.9072        | 0.0734        | 8.2379        | 0.0635        | 8.3014        | 2.1943         | 0.0592        | 2.2535        |               | 7,720.0762        | 7,720.0762        | 0.7994        | 0.4642        | 7,878.4031        |
| <b>Total</b> | <b>14.9193</b> | <b>6.2748</b> | <b>71.6089</b> | <b>0.0790</b> | <b>8.2379</b> | <b>0.2531</b> | <b>8.4909</b> | <b>2.1943</b>  | <b>0.2487</b> | <b>2.4430</b> | <b>0.0000</b> | <b>8,624.0930</b> | <b>8,624.0930</b> | <b>0.8581</b> | <b>0.4800</b> | <b>8,788.5856</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         | 8.1944         | 0.2804        | 24.3533        | 1.2900e-003   |               | 0.1351        | 0.1351        |                | 0.1351        | 0.1351        | 0.0000        | 43.9057           | 43.9057           | 0.0422        | 0.0000        | 44.9602           |
| Energy       | 0.0788         | 0.6822        | 0.3484         | 4.3000e-003   |               | 0.0545        | 0.0545        |                | 0.0545        | 0.0545        |               | 860.1111          | 860.1111          | 0.0165        | 0.0158        | 865.2223          |
| Mobile       | 6.6460         | 5.3122        | 46.9072        | 0.0734        | 8.2379        | 0.0635        | 8.3014        | 2.1943         | 0.0592        | 2.2535        |               | 7,720.0762        | 7,720.0762        | 0.7994        | 0.4642        | 7,878.4031        |
| <b>Total</b> | <b>14.9193</b> | <b>6.2748</b> | <b>71.6089</b> | <b>0.0790</b> | <b>8.2379</b> | <b>0.2531</b> | <b>8.4909</b> | <b>2.1943</b>  | <b>0.2487</b> | <b>2.4430</b> | <b>0.0000</b> | <b>8,624.0930</b> | <b>8,624.0930</b> | <b>0.8581</b> | <b>0.4800</b> | <b>8,788.5856</b> |

## Jefferson Oceanside Mixed Use Development - San Diego 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  | N20  | CO2e |
|-------------------|------|------|------|------|---------------|--------------|------------|----------------|---------------|-------------|----------|----------|-----------|------|------|------|
| Percent Reduction | 0.00 | 0.00 | 0.00 | 0.00 | 0.00          | 0.00         | 0.00       | 0.00           | 0.00          | 0.00        | 0.00     | 0.00     | 0.00      | 0.00 | 0.00 | 0.00 |

**3.0 Construction Detail****Construction Phase**

| Phase Number | Phase Name            | Phase Type            | Start Date | End Date   | Num Days Week | Num Days | Phase Description |
|--------------|-----------------------|-----------------------|------------|------------|---------------|----------|-------------------|
| 1            | Site Preparation      | Site Preparation      | 8/1/2023   | 8/28/2023  | 5             | 20       |                   |
| 2            | Grading               | Grading               | 8/29/2023  | 10/30/2023 | 5             | 45       |                   |
| 3            | Paving                | Paving                | 10/31/2023 | 12/18/2023 | 5             | 35       |                   |
| 4            | Building Construction | Building Construction | 12/19/2023 | 8/25/2025  | 5             | 440      |                   |
| 5            | Architectural Coating | Architectural Coating | 6/1/2025   | 8/25/2025  | 5             | 61       |                   |

Acres of Grading (Site Preparation Phase): 30

Acres of Grading (Grading Phase): 135

Acres of Paving: 3.37

Residential Indoor: 597,375; Residential Outdoor: 199,125; Non-Residential Indoor: 4,500; Non-Residential Outdoor: 1,500; Striped Parking Area: 9,000 (Architectural Coating – sqft)

**OffRoad Equipment**

| Phase Name       | Offroad Equipment Type    | Amount | Usage Hours | Horse Power | Load Factor |
|------------------|---------------------------|--------|-------------|-------------|-------------|
| Site Preparation | Rubber Tired Dozers       | 3      | 8.00        | 247         | 0.40        |
| Site Preparation | Tractors/Loaders/Backhoes | 4      | 8.00        | 97          | 0.37        |
| Grading          | Excavators                | 2      | 8.00        | 158         | 0.38        |
| Grading          | Graders                   | 1      | 8.00        | 187         | 0.41        |
| Grading          | Rubber Tired Dozers       | 1      | 8.00        | 247         | 0.40        |
| Grading          | Scrapers                  | 2      | 8.00        | 367         | 0.48        |

## Jefferson Oceanside Mixed Use Development - San Diego County, Winter

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

|                       |                           |   |      |     |      |
|-----------------------|---------------------------|---|------|-----|------|
| Grading               | Tractors/Loaders/Backhoes | 2 | 8.00 | 97  | 0.37 |
| Paving                | Pavers                    | 2 | 8.00 | 130 | 0.42 |
| Paving                | Paving Equipment          | 2 | 8.00 | 132 | 0.36 |
| Paving                | Rollers                   | 2 | 8.00 | 80  | 0.38 |
| Building Construction | Cranes                    | 1 | 7.00 | 231 | 0.29 |
| Building Construction | Forklifts                 | 3 | 8.00 | 89  | 0.20 |
| Building Construction | Generator Sets            | 1 | 8.00 | 84  | 0.74 |
| Building Construction | Tractors/Loaders/Backhoes | 3 | 7.00 | 97  | 0.37 |
| Building Construction | Welders                   | 1 | 8.00 | 46  | 0.45 |
| Architectural Coating | Air Compressors           | 1 | 6.00 | 78  | 0.48 |

**Trips and VMT**

| Phase Name            | Offroad Equipment Count | Worker Trip Number | Vendor Trip Number | Hauling Trip Number | Worker Trip Length | Vendor Trip Length | Hauling Trip Length | Worker Vehicle Class | Vendor Vehicle Class | Hauling Vehicle Class |
|-----------------------|-------------------------|--------------------|--------------------|---------------------|--------------------|--------------------|---------------------|----------------------|----------------------|-----------------------|
| Site Preparation      | 7                       | 18.00              | 0.00               | 0.00                | 10.80              | 7.30               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Grading               | 8                       | 20.00              | 0.00               | 1,263.00            | 10.80              | 7.30               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Paving                | 6                       | 15.00              | 0.00               | 0.00                | 10.80              | 7.30               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Building Construction | 9                       | 277.00             | 57.00              | 0.00                | 10.80              | 7.30               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Architectural Coating | 1                       | 55.00              | 0.00               | 0.00                | 10.80              | 7.30               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |

**3.1 Mitigation Measures Construction**

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

Jefferson Oceanside Mixed Use Development - San Diego County, Winter

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

### **3.2 Site Preparation - 2023**

## **Unmitigated Construction On-Site**

|               | ROG    | NOx     | CO      | SO2    | Fugitive PM10 | Exhaust PM10 | PM10 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 |        |         |         |        | 19.6570       | 0.0000       | 19.6570    | 10.1025        | 0.0000        | 10.1025     |          |           | 0.0000    |        |     | 0.0000    |  |
| Off-Road      | 2.6595 | 27.5242 | 18.2443 | 0.0381 |               | 1.2660       | 1.2660     |                | 1.1647        | 1.1647      |          | 3,687.308 | 3,687.308 | 1.1926 |     | 3,717.121 |  |
| Total         | 2.6595 | 27.5242 | 18.2443 | 0.0381 | 19.6570       | 1.2660       | 20.9230    | 10.1025        | 1.1647        | 11.2672     |          | 3,687.308 | 3,687.308 | 1.1926 |     | 3,717.121 |  |
|               |        |         |         |        |               |              |            |                |               |             | 1        | 1         |           |        |     | 9         |  |

## **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   | 0.0000 |  |
| Vendor   | 0.0000 | 0.0000 | 0.0000 | 0.0000      | 0.0000        | 0.0000       | 0.0000     | 0.0000         | 0.0000        | 0.0000      | 0.0000   | 0.0000    | 0.0000      | 0.0000      | 0.0000   | 0.0000 |  |
| Worker   | 0.0534 | 0.0344 | 0.4116 | 1.2300e-003 | 0.1479        | 8.0000e-004  | 0.1487     | 0.0392         | 7.3000e-004   | 0.0400      | 126.3637 | 126.3637  | 3.8100e-003 | 3.5600e-003 | 127.5200 |        |  |
| Total    | 0.0534 | 0.0344 | 0.4116 | 1.2300e-003 | 0.1479        | 8.0000e-004  | 0.1487     | 0.0392         | 7.3000e-004   | 0.0400      | 126.3637 | 126.3637  | 3.8100e-003 | 3.5600e-003 | 127.5200 |        |  |

## Jefferson Oceanside Mixed Use Development - San Diego County, Winter

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

|               | ROG    | NOx     | CO      | SO2    | Fugitive PM10 | Exhaust PM10 | PM10 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 |        |         |         |        | 19.6570       | 0.0000       | 19.6570    | 10.1025        | 0.0000        | 10.1025     |          |                | 0.0000         |        |     | 0.0000         |  |
| Off-Road      | 0.9312 | 19.0656 | 22.9600 | 0.0381 |               | 0.1419       | 0.1419     |                | 0.1419        | 0.1419      | 0.0000   | 3,687.308<br>1 | 3,687.308<br>1 | 1.1926 |     | 3,717.121<br>9 |  |
| Total         | 0.9312 | 19.0656 | 22.9600 | 0.0381 | 19.6570       | 0.1419       | 19.7989    | 10.1025        | 0.1419        | 10.2444     | 0.0000   | 3,687.308<br>1 | 3,687.308<br>1 | 1.1926 |     | 3,717.121<br>9 |  |

**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   | 0.0000 |  |
| Vendor   | 0.0000 | 0.0000 | 0.0000 | 0.0000      | 0.0000        | 0.0000       | 0.0000     | 0.0000         | 0.0000        | 0.0000      | 0.0000   | 0.0000    | 0.0000      | 0.0000      | 0.0000   | 0.0000 |  |
| Worker   | 0.0534 | 0.0344 | 0.4116 | 1.2300e-003 | 0.1479        | 8.0000e-004  | 0.1487     | 0.0392         | 7.3000e-004   | 0.0400      | 126.3637 | 126.3637  | 3.8100e-003 | 3.5600e-003 | 127.5200 |        |  |
| Total    | 0.0534 | 0.0344 | 0.4116 | 1.2300e-003 | 0.1479        | 8.0000e-004  | 0.1487     | 0.0392         | 7.3000e-004   | 0.0400      | 126.3637 | 126.3637  | 3.8100e-003 | 3.5600e-003 | 127.5200 |        |  |

## Jefferson Oceanside Mixed Use Development - San Diego County, Winter

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

|               | ROG           | NOx            | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total     | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2              | Total CO2              | CH4           | N2O | CO2e   |                        |
|---------------|---------------|----------------|----------------|---------------|---------------|---------------|----------------|----------------|---------------|---------------|----------|------------------------|------------------------|---------------|-----|--------|------------------------|
| Category      | lb/day        |                |                |               |               |               |                |                |               |               | lb/day   |                        |                        |               |     |        |                        |
| Fugitive Dust |               |                |                |               | 9.2351        | 0.0000        | 9.2351         | 3.6585         | 0.0000        | 3.6585        |          |                        | 0.0000                 |               |     | 0.0000 |                        |
| Off-Road      | 3.3217        | 34.5156        | 28.0512        | 0.0621        |               | 1.4245        | 1.4245         |                | 1.3105        | 1.3105        |          | 6,011.477<br>7         | 6,011.477<br>7         | 1.9442        |     |        | 6,060.083<br>6         |
| <b>Total</b>  | <b>3.3217</b> | <b>34.5156</b> | <b>28.0512</b> | <b>0.0621</b> | <b>9.2351</b> | <b>1.4245</b> | <b>10.6596</b> | <b>3.6585</b>  | <b>1.3105</b> | <b>4.9691</b> |          | <b>6,011.477<br/>7</b> | <b>6,011.477<br/>7</b> | <b>1.9442</b> |     |        | <b>6,060.083<br/>6</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      | 0.0598        | 3.8196        | 1.0211        | 0.0168        | 0.4909        | 0.0312        | 0.5221        | 0.1346         | 0.0299        | 0.1644        |          | 1,857.788<br>6         | 1,857.788<br>6         | 0.0933        | 0.2955        |      | 1,948.164<br>9         |
| 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       | 0.0593        | 0.0382        | 0.4573        | 1.3700e-003   | 0.1643        | 8.8000e-004   | 0.1652        | 0.0436         | 8.1000e-004   | 0.0444        |          | 140.4041               | 140.4041               | 4.2400e-003   | 3.9600e-003   |      | 141.6889               |
| <b>Total</b> | <b>0.1191</b> | <b>3.8578</b> | <b>1.4785</b> | <b>0.0182</b> | <b>0.6552</b> | <b>0.0321</b> | <b>0.6873</b> | <b>0.1781</b>  | <b>0.0307</b> | <b>0.2088</b> |          | <b>1,998.192<br/>7</b> | <b>1,998.192<br/>7</b> | <b>0.0976</b> | <b>0.2994</b> |      | <b>2,089.853<br/>8</b> |

## Jefferson Oceanside Mixed Use Development - San Diego County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied****3.3 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 |        |         |         |        | 9.2351        | 0.0000       | 9.2351     | 3.6585         | 0.0000        | 3.6585      |          |                | 0.0000         |        |     | 0.0000         |  |
| Off-Road      | 1.5231 | 29.9782 | 36.7226 | 0.0621 |               | 0.1949       | 0.1949     |                | 0.1949        | 0.1949      | 0.0000   | 6,011.477<br>7 | 6,011.477<br>7 | 1.9442 |     | 6,060.083<br>6 |  |
| Total         | 1.5231 | 29.9782 | 36.7226 | 0.0621 | 9.2351        | 0.1949       | 9.4300     | 3.6585         | 0.1949        | 3.8534      | 0.0000   | 6,011.477<br>7 | 6,011.477<br>7 | 1.9442 |     | 6,060.083<br>6 |  |

**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  | 0.0598 | 3.8196 | 1.0211 | 0.0168      | 0.4909        | 0.0312       | 0.5221     | 0.1346         | 0.0299        | 0.1644      |          | 1,857.788<br>6 | 1,857.788<br>6 | 0.0933      | 0.2955      | 1,948.164<br>9 |  |
| Vendor   | 0.0000 | 0.0000 | 0.0000 | 0.0000      | 0.0000        | 0.0000       | 0.0000     | 0.0000         | 0.0000        | 0.0000      | 0.0000   | 0.0000         | 0.0000         | 0.0000      | 0.0000      | 0.0000         |  |
| Worker   | 0.0593 | 0.0382 | 0.4573 | 1.3700e-003 | 0.1643        | 8.8000e-004  | 0.1652     | 0.0436         | 8.1000e-004   | 0.0444      |          | 140.4041       | 140.4041       | 4.2400e-003 | 3.9600e-003 | 141.6889       |  |
| Total    | 0.1191 | 3.8578 | 1.4785 | 0.0182      | 0.6552        | 0.0321       | 0.6873     | 0.1781         | 0.0307        | 0.2088      |          | 1,998.192<br>7 | 1,998.192<br>7 | 0.0976      | 0.2994      | 2,089.853<br>8 |  |

## Jefferson Oceanside Mixed Use Development - San Diego County, Winter

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

|              | ROG           | NOx            | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2               | NBio- CO2              | Total CO2     | CH4 | N2O | CO2e                   |
|--------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|------------------------|------------------------|---------------|-----|-----|------------------------|
| Category     | lb/day        |                |                |               |               |               |               |                |               |               | lb/day                 |                        |               |     |     |                        |
| Off-Road     | 1.0327        | 10.1917        | 14.5842        | 0.0228        |               | 0.5102        | 0.5102        |                | 0.4694        | 0.4694        | 2,207.584<br>1         | 2,207.584<br>1         | 0.7140        |     |     | 2,225.433<br>6         |
| Paving       | 0.2523        |                |                |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |                        | 0.0000                 |               |     |     | 0.0000                 |
| <b>Total</b> | <b>1.2850</b> | <b>10.1917</b> | <b>14.5842</b> | <b>0.0228</b> |               | <b>0.5102</b> | <b>0.5102</b> |                | <b>0.4694</b> | <b>0.4694</b> | <b>2,207.584<br/>1</b> | <b>2,207.584<br/>1</b> | <b>0.7140</b> |     |     | <b>2,225.433<br/>6</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 | 0.0000          |
| Vendor       | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        | 0.0000          | 0.0000          | 0.0000             | 0.0000             | 0.0000 | 0.0000          |
| Worker       | 0.0445        | 0.0287        | 0.3430        | 1.0300e-003        | 0.1232        | 6.6000e-004        | 0.1239        | 0.0327         | 6.1000e-004        | 0.0333        | 105.3031        | 105.3031        | 3.1800e-003        | 2.9700e-003        |        | 106.2666        |
| <b>Total</b> | <b>0.0445</b> | <b>0.0287</b> | <b>0.3430</b> | <b>1.0300e-003</b> | <b>0.1232</b> | <b>6.6000e-004</b> | <b>0.1239</b> | <b>0.0327</b>  | <b>6.1000e-004</b> | <b>0.0333</b> | <b>105.3031</b> | <b>105.3031</b> | <b>3.1800e-003</b> | <b>2.9700e-003</b> |        | <b>106.2666</b> |

## Jefferson Oceanside Mixed Use Development - San Diego County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied****3.4 Paving - 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     | 0.5609        | 11.2952        | 17.2957        | 0.0228        |               | 0.0914        | 0.0914        |                | 0.0914        | 0.0914        | 0.0000        | 2,207.584        | 2,207.584        | 0.7140        |     | 2,225.433        |
| Paving       | 0.2523        |                |                |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |               |                  | 0.0000           |               |     | 0.0000           |
| <b>Total</b> | <b>0.8132</b> | <b>11.2952</b> | <b>17.2957</b> | <b>0.0228</b> |               | <b>0.0914</b> | <b>0.0914</b> |                | <b>0.0914</b> | <b>0.0914</b> | <b>0.0000</b> | <b>2,207.584</b> | <b>2,207.584</b> | <b>0.7140</b> |     | <b>2,225.433</b> |
|              |               |                |                |               |               |               |               |                |               |               |               |                  |                  |               |     | <b>6</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             | 0.0000          |
| Vendor       | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        | 0.0000   | 0.0000          | 0.0000          | 0.0000             | 0.0000             | 0.0000          |
| Worker       | 0.0445        | 0.0287        | 0.3430        | 1.0300e-003        | 0.1232        | 6.6000e-004        | 0.1239        | 0.0327         | 6.1000e-004        | 0.0333        |          | 105.3031        | 105.3031        | 3.1800e-003        | 2.9700e-003        | 106.2666        |
| <b>Total</b> | <b>0.0445</b> | <b>0.0287</b> | <b>0.3430</b> | <b>1.0300e-003</b> | <b>0.1232</b> | <b>6.6000e-004</b> | <b>0.1239</b> | <b>0.0327</b>  | <b>6.1000e-004</b> | <b>0.0333</b> |          | <b>105.3031</b> | <b>105.3031</b> | <b>3.1800e-003</b> | <b>2.9700e-003</b> | <b>106.2666</b> |

## Jefferson Oceanside Mixed Use Development - San Diego County, Winter

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

|          | ROG    | NOx     | CO      | SO2    | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4    | N2O | CO2e      |  |
|----------|--------|---------|---------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|--------|-----|-----------|--|
| Category | lb/day |         |         |        |               |              |            |                |               |             |          |           |           |        |     | lb/day    |  |
| Off-Road | 1.5728 | 14.3849 | 16.2440 | 0.0269 |               | 0.6997       | 0.6997     |                | 0.6584        | 0.6584      |          | 2,555.209 | 2,555.209 | 0.6079 |     | 2,570.406 |  |
| Total    | 1.5728 | 14.3849 | 16.2440 | 0.0269 |               | 0.6997       | 0.6997     |                | 0.6584        | 0.6584      |          | 2,555.209 | 2,555.209 | 0.6079 |     | 2,570.406 |  |
|          |        |         |         |        |               |              |            |                |               |             |          | 9         | 9         |        |     | 1         |  |

**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 | 0.0000    |  |
| Vendor   | 0.0662 | 2.5463 | 0.9071 | 0.0117 | 0.3860        | 0.0150       | 0.4010     | 0.1111         | 0.0143        | 0.1254      |          | 1,261.758 | 1,261.758 | 0.0380 | 0.1829 | 1,317.201 |  |
| Worker   | 0.8214 | 0.5290 | 6.3339 | 0.0190 | 2.2755        | 0.0122       | 2.2877     | 0.6036         | 0.0113        | 0.6148      |          | 1,944.596 | 1,944.596 | 0.0587 | 0.0548 | 1,962.390 |  |
| Total    | 0.8876 | 3.0753 | 7.2411 | 0.0307 | 2.6615        | 0.0272       | 2.6887     | 0.7147         | 0.0256        | 0.7403      |          | 3,206.355 | 3,206.355 | 0.0967 | 0.2377 | 3,279.591 |  |
|          |        |        |        |        |               |              |            |                |               |             |          | 2         | 2         |        |        | 9         |  |

## Jefferson Oceanside Mixed Use Development - San Diego County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied****3.5 Building 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     | 0.6739        | 14.2261        | 17.8738        | 0.0269        |               | 0.1355        | 0.1355        |                | 0.1355        | 0.1355        | 0.0000        | 2,555.209<br>9         | 2,555.209<br>9         | 0.6079        |     | 2,570.406<br>1         |  |
| <b>Total</b> | <b>0.6739</b> | <b>14.2261</b> | <b>17.8738</b> | <b>0.0269</b> |               | <b>0.1355</b> | <b>0.1355</b> |                | <b>0.1355</b> | <b>0.1355</b> | <b>0.0000</b> | <b>2,555.209<br/>9</b> | <b>2,555.209<br/>9</b> | <b>0.6079</b> |     | <b>2,570.406<br/>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                 | 0.0000 |  |
| Vendor       | 0.0662        | 2.5463        | 0.9071        | 0.0117        | 0.3860        | 0.0150        | 0.4010        | 0.1111         | 0.0143        | 0.1254        | 1,261.758<br>9         | 1,261.758<br>9         | 0.0380        | 0.1829        | 1,317.201<br>4         |        |  |
| Worker       | 0.8214        | 0.5290        | 6.3339        | 0.0190        | 2.2755        | 0.0122        | 2.2877        | 0.6036         | 0.0113        | 0.6148        | 1,944.596<br>3         | 1,944.596<br>3         | 0.0587        | 0.0548        | 1,962.390<br>6         |        |  |
| <b>Total</b> | <b>0.8876</b> | <b>3.0753</b> | <b>7.2411</b> | <b>0.0307</b> | <b>2.6615</b> | <b>0.0272</b> | <b>2.6887</b> | <b>0.7147</b>  | <b>0.0256</b> | <b>0.7403</b> | <b>3,206.355<br/>2</b> | <b>3,206.355<br/>2</b> | <b>0.0967</b> | <b>0.2377</b> | <b>3,279.591<br/>9</b> |        |  |

Jefferson Oceanside Mixed Use Development - San Diego County, Winter

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

3.5 Building Construction - 2024

## **Unmitigated Construction On-Site**

|          | ROG    | NOx     | CO      | SO2    | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2  | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e      |  |
|----------|--------|---------|---------|--------|---------------|--------------|------------|----------------|---------------|-------------|-----------|-----------|-----------|-----|-----|-----------|--|
| Category | lb/day |         |         |        |               |              |            |                |               |             | lb/day    |           |           |     |     |           |  |
| Off-Road | 1.4716 | 13.4438 | 16.1668 | 0.0270 |               | 0.6133       | 0.6133     |                | 0.5769        | 0.5769      | 2,555.698 | 2,555.698 | 0.6044    |     |     | 2,570.807 |  |
| Total    | 1.4716 | 13.4438 | 16.1668 | 0.0270 |               | 0.6133       | 0.6133     |                | 0.5769        | 0.5769      | 2,555.698 | 2,555.698 | 0.6044    |     |     | 2,570.807 |  |

## **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     | 0.0000 |  |
| Vendor   | 0.0636 | 2.5291 | 0.8864 | 0.0115 | 0.3861        | 0.0150       | 0.4011     | 0.1111         | 0.0144        | 0.1255      | 1,239.8109 | 1,239.8109 | 0.0389    | 0.1797 | 1,294.3209 |        |  |
| Worker   | 0.7735 | 0.4759 | 5.9306 | 0.0184 | 2.2755        | 0.0117       | 2.2872     | 0.6036         | 0.0107        | 0.6143      | 1,895.9010 | 1,895.9010 | 0.0535    | 0.0512 | 1,912.4940 |        |  |
| Total    | 0.8370 | 3.0050 | 6.8171 | 0.0299 | 2.6615        | 0.0267       | 2.6882     | 0.7147         | 0.0251        | 0.7398      | 3,135.7119 | 3,135.7119 | 0.0924    | 0.2309 | 3,206.8148 |        |  |

Jefferson Oceanside Mixed Use Development - San Diego County, Winter

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

3.5 Building 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 | 0.6739 | 14.2261 | 17.8738 | 0.0270 |               | 0.1355       | 0.1355     |                | 0.1355        | 0.1355      | 0.0000   | 2,555.6989 | 2,555.6989 | 0.6044 |     | 2,570.8077 |  |
| Total    | 0.6739 | 14.2261 | 17.8738 | 0.0270 |               | 0.1355       | 0.1355     |                | 0.1355        | 0.1355      | 0.0000   | 2,555.6989 | 2,555.6989 | 0.6044 |     | 2,570.8077 |  |

## **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     | 0.0000 |  |
| Vendor   | 0.0636 | 2.5291 | 0.8864 | 0.0115 | 0.3861        | 0.0150       | 0.4011     | 0.1111         | 0.0144        | 0.1255      | 1,239.8109 | 1,239.8109 | 0.0389    | 0.1797 | 1,294.3209 |        |  |
| Worker   | 0.7735 | 0.4759 | 5.9306 | 0.0184 | 2.2755        | 0.0117       | 2.2872     | 0.6036         | 0.0107        | 0.6143      | 1,895.9010 | 1,895.9010 | 0.0535    | 0.0512 | 1,912.4900 |        |  |
| Total    | 0.8370 | 3.0050 | 6.8171 | 0.0299 | 2.6615        | 0.0267       | 2.6882     | 0.7147         | 0.0251        | 0.7398      | 3,135.7119 | 3,135.7119 | 0.0924    | 0.2309 | 3,206.8118 |        |  |

Jefferson Oceanside Mixed Use Development - San Diego County, Winter

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

### **3.5 Building Construction - 2025**

## **Unmitigated Construction On-Site**

|          | ROG    | NOx     | CO      | SO2    | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2  | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e      |  |
|----------|--------|---------|---------|--------|---------------|--------------|------------|----------------|---------------|-------------|-----------|-----------|-----------|-----|-----|-----------|--|
| Category | lb/day |         |         |        |               |              |            |                |               |             | lb/day    |           |           |     |     |           |  |
| Off-Road | 1.3674 | 12.4697 | 16.0847 | 0.0270 |               | 0.5276       | 0.5276     |                | 0.4963        | 0.4963      | 2,556.474 | 2,556.474 | 0.6010    |     |     | 2,571.498 |  |
| Total    | 1.3674 | 12.4697 | 16.0847 | 0.0270 |               | 0.5276       | 0.5276     |                | 0.4963        | 0.4963      | 2,556.474 | 2,556.474 | 0.6010    |     |     | 2,571.498 |  |

## **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     | 0.0000 |  |
| Vendor   | 0.0614 | 2.5046 | 0.8718 | 0.0112 | 0.3861        | 0.0150       | 0.4010     | 0.1111         | 0.0143        | 0.1255      | 1,216.2022 | 1,216.2022 | 0.0399    | 0.1761 | 1,269.6887 |        |  |
| Worker   | 0.7304 | 0.4310 | 5.5721 | 0.0178 | 2.2755        | 0.0112       | 2.2867     | 0.6036         | 0.0103        | 0.6139      | 1,849.6262 | 1,849.6262 | 0.0488    | 0.0481 | 1,865.1648 |        |  |
| Total    | 0.7918 | 2.9355 | 6.4439 | 0.0290 | 2.6615        | 0.0262       | 2.6877     | 0.7147         | 0.0246        | 0.7393      | 3,065.8285 | 3,065.8285 | 0.0887    | 0.2242 | 3,134.8535 |        |  |

## Jefferson Oceanside Mixed Use Development - San Diego County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied****3.5 Building Construction - 2025****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 | 0.6739 | 14.2261 | 17.8738 | 0.0270 |               | 0.1355       | 0.1355     |                | 0.1355        | 0.1355      | 0.0000   | 2,556.474 | 2,556.474 | 0.6010 |     | 2,571.498 |  |
| Total    | 0.6739 | 14.2261 | 17.8738 | 0.0270 |               | 0.1355       | 0.1355     |                | 0.1355        | 0.1355      | 0.0000   | 2,556.474 | 2,556.474 | 0.6010 |     | 2,571.498 |  |

**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 | 0.0000    |  |
| Vendor   | 0.0614 | 2.5046 | 0.8718 | 0.0112 | 0.3861        | 0.0150       | 0.4010     | 0.1111         | 0.0143        | 0.1255      |          | 1,216.202 | 1,216.202 | 0.0399 | 0.1761 | 1,269.688 |  |
| Worker   | 0.7304 | 0.4310 | 5.5721 | 0.0178 | 2.2755        | 0.0112       | 2.2867     | 0.6036         | 0.0103        | 0.6139      |          | 1,849.626 | 1,849.626 | 0.0488 | 0.0481 | 1,865.164 |  |
| Total    | 0.7918 | 2.9355 | 6.4439 | 0.0290 | 2.6615        | 0.0262       | 2.6877     | 0.7147         | 0.0246        | 0.7393      |          | 3,065.828 | 3,065.828 | 0.0887 | 0.2242 | 3,134.853 |  |

## Jefferson Oceanside Mixed Use Development - San Diego County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied****3.6 Architectural Coating - 2025****Unmitigated Construction On-Site**

|                 | ROG            | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10 | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2 | Total CO2       | CH4             | N2O           | CO2e   |                 |
|-----------------|----------------|---------------|---------------|--------------------|---------------|--------------|---------------|----------------|---------------|---------------|---------------|-----------|-----------------|-----------------|---------------|--------|-----------------|
| Category        | lb/day         |               |               |                    |               |              |               |                |               |               | lb/day        |           |                 |                 |               |        |                 |
| Archit. Coating | 61.6607        |               |               |                    |               |              | 0.0000        | 0.0000         |               | 0.0000        |               |           | 0.0000          |                 |               | 0.0000 |                 |
| Off-Road        | 0.1709         | 1.1455        | 1.8091        | 2.9700e-003        |               |              | 0.0515        | 0.0515         |               | 0.0515        | 0.0515        |           | 281.4481        | 281.4481        | 0.0154        |        | 281.8319        |
| <b>Total</b>    | <b>61.8316</b> | <b>1.1455</b> | <b>1.8091</b> | <b>2.9700e-003</b> |               |              | <b>0.0515</b> | <b>0.0515</b>  |               | <b>0.0515</b> | <b>0.0515</b> |           | <b>281.4481</b> | <b>281.4481</b> | <b>0.0154</b> |        | <b>281.8319</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             |                 |
| 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             |                 |
| Worker       | 0.1450        | 0.0856        | 1.1064        | 3.5300e-003        | 0.4518        | 2.2200e-003        | 0.4540        | 0.1198         | 2.0400e-003        | 0.1219        |          |           | 367.2543        | 367.2543        | 9.7000e-003        | 9.5400e-003        | 370.3396        |
| <b>Total</b> | <b>0.1450</b> | <b>0.0856</b> | <b>1.1064</b> | <b>3.5300e-003</b> | <b>0.4518</b> | <b>2.2200e-003</b> | <b>0.4540</b> | <b>0.1198</b>  | <b>2.0400e-003</b> | <b>0.1219</b> |          |           | <b>367.2543</b> | <b>367.2543</b> | <b>9.7000e-003</b> | <b>9.5400e-003</b> | <b>370.3396</b> |

## Jefferson Oceanside Mixed Use Development - San Diego County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied****3.6 Architectural Coating - 2025****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 | 61.6607        |               |               |                    |               |              | 0.0000        | 0.0000         |               | 0.0000        |               |               | 0.0000          |                 |               | 0.0000 |                 |
| Off-Road        | 0.0594         | 1.3570        | 1.8324        | 2.9700e-003        |               |              | 0.0143        | 0.0143         |               | 0.0143        | 0.0143        | 0.0000        | 281.4481        | 281.4481        | 0.0154        |        | 281.8319        |
| <b>Total</b>    | <b>61.7201</b> | <b>1.3570</b> | <b>1.8324</b> | <b>2.9700e-003</b> |               |              | <b>0.0143</b> | <b>0.0143</b>  |               | <b>0.0143</b> | <b>0.0143</b> | <b>0.0000</b> | <b>281.4481</b> | <b>281.4481</b> | <b>0.0154</b> |        | <b>281.8319</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             |                 |
| 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             |                 |
| Worker       | 0.1450        | 0.0856        | 1.1064        | 3.5300e-003        | 0.4518        | 2.2200e-003        | 0.4540        | 0.1198         | 2.0400e-003        | 0.1219        |          |           | 367.2543        | 367.2543        | 9.7000e-003        | 9.5400e-003        | 370.3396        |
| <b>Total</b> | <b>0.1450</b> | <b>0.0856</b> | <b>1.1064</b> | <b>3.5300e-003</b> | <b>0.4518</b> | <b>2.2200e-003</b> | <b>0.4540</b> | <b>0.1198</b>  | <b>2.0400e-003</b> | <b>0.1219</b> |          |           | <b>367.2543</b> | <b>367.2543</b> | <b>9.7000e-003</b> | <b>9.5400e-003</b> | <b>370.3396</b> |

## Jefferson Oceanside Mixed Use Development - San Diego 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   | 6.6460 | 5.3122 | 46.9072 | 0.0734 | 8.2379        | 0.0635       | 8.3014     | 2.1943         | 0.0592        | 2.2535      | 7,720.076 | 7,720.076 | 0.7994    | 0.4642 | 7,878.403 | 1    |  |
| Unmitigated | 6.6460 | 5.3122 | 46.9072 | 0.0734 | 8.2379        | 0.0635       | 8.3014     | 2.1943         | 0.0592        | 2.2535      | 7,720.076 | 7,720.076 | 0.7994    | 0.4642 | 7,878.403 | 1    |  |

**4.2 Trip Summary Information**

| Land Use                            | Average Daily Trip Rate |                 |                 | Unmitigated      |                  | Mitigated        |                  |
|-------------------------------------|-------------------------|-----------------|-----------------|------------------|------------------|------------------|------------------|
|                                     | Weekday                 | Saturday        | Sunday          | Annual VMT       | Annual VMT       | Annual VMT       | Annual VMT       |
| Apartments Mid Rise                 | 1,770.00                | 1,770.00        | 1770.00         | 3,814,138        | 3,814,138        | 3,814,138        | 3,814,138        |
| Fast Food Restaurant w/o Drive Thru | 2,100.00                | 2,100.00        | 2100.00         | 99,372           | 99,372           | 99,372           | 99,372           |
| Parking Lot                         | 0.00                    | 0.00            | 0.00            |                  |                  |                  |                  |
| <b>Total</b>                        | <b>3,870.00</b>         | <b>3,870.00</b> | <b>3,870.00</b> | <b>3,913,510</b> | <b>3,913,510</b> | <b>3,913,510</b> | <b>3,913,510</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 |
| Apartments Mid Rise            | 5.92       | 0.00       | 0.00        | 100.00     | 0.00       | 0.00        | 100            | 0        | 0       |
| Fast Food Restaurant w/o Drive | 0.00       | 0.13       | 0.00        | 0.00       | 100.00     | 0.00        | 100            | 0        | 0       |
| Parking Lot                    | 9.50       | 7.30       | 7.30        | 0.00       | 0.00       | 0.00        | 0              | 0        | 0       |

## Jefferson Oceanside Mixed Use Development - San Diego 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       |
|-------------------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Apartments Mid Rise                 | 0.565387 | 0.062253 | 0.175474 | 0.116234 | 0.023574 | 0.006359 | 0.009156 | 0.006316 | 0.000699 | 0.000586 | 0.028465 | 0.000937 | 0.004559 |
| Fast Food Restaurant w/o Drive Thru | 0.565387 | 0.062253 | 0.175474 | 0.116234 | 0.023574 | 0.006359 | 0.009156 | 0.006316 | 0.000699 | 0.000586 | 0.028465 | 0.000937 | 0.004559 |
| Parking Lot                         | 0.565387 | 0.062253 | 0.175474 | 0.116234 | 0.023574 | 0.006359 | 0.009156 | 0.006316 | 0.000699 | 0.000586 | 0.028465 | 0.000937 | 0.004559 |

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

Install High Efficiency Lighting

|                        | ROG    | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4    | N2O      | CO2e |
|------------------------|--------|--------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|--------|----------|------|
| Category               | lb/day |        |        |             |               |              |            |                |               |             |          | lb/day    |           |        |          |      |
| NaturalGas Mitigated   | 0.0788 | 0.6822 | 0.3484 | 4.3000e-003 |               | 0.0545       | 0.0545     |                | 0.0545        | 0.0545      | 860.1111 | 860.1111  | 0.0165    | 0.0158 | 865.2223 |      |
| NaturalGas Unmitigated | 0.0788 | 0.6822 | 0.3484 | 4.3000e-003 |               | 0.0545       | 0.0545     |                | 0.0545        | 0.0545      | 860.1111 | 860.1111  | 0.0165    | 0.0158 | 865.2223 |      |

## Jefferson Oceanside Mixed Use Development - San Diego 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          |                 |               |               |                 |      |
| Apartments Mid Rise                 | 5880.64        | 0.0634        | 0.5419        | 0.2306        | 3.4600e-003        |               | 0.0438        | 0.0438        |                | 0.0438        | 0.0438        | 691.8404        | 691.8404        | 0.0133        | 0.0127        | 695.9516        |      |
| Fast Food Restaurant w/o Drive Thru | 1430.3         | 0.0154        | 0.1402        | 0.1178        | 8.4000e-004        |               | 0.0107        | 0.0107        |                | 0.0107        | 0.0107        | 168.2708        | 168.2708        | 3.2300e-003   | 3.0800e-003   | 169.2707        |      |
| 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>0.0788</b> | <b>0.6822</b> | <b>0.3484</b> | <b>4.3000e-003</b> |               | <b>0.0545</b> | <b>0.0545</b> |                | <b>0.0545</b> | <b>0.0545</b> | <b>860.1111</b> | <b>860.1111</b> | <b>0.0165</b> | <b>0.0158</b> | <b>865.2223</b> |      |

## Jefferson Oceanside Mixed Use Development - San Diego 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          |                 |               |               |                 |      |
| Apartments Mid Rise                 | 5.88064        | 0.0634        | 0.5419        | 0.2306        | 3.4600e-003        |               | 0.0438        | 0.0438        |                | 0.0438        | 0.0438        | 691.8404        | 691.8404        | 0.0133        | 0.0127        | 695.9516        |      |
| Fast Food Restaurant w/o Drive Thru | 1.4303         | 0.0154        | 0.1402        | 0.1178        | 8.4000e-004        |               | 0.0107        | 0.0107        |                | 0.0107        | 0.0107        | 168.2708        | 168.2708        | 3.2300e-003   | 3.0800e-003   | 169.2707        |      |
| 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>0.0788</b> | <b>0.6822</b> | <b>0.3484</b> | <b>4.3000e-003</b> |               | <b>0.0545</b> | <b>0.0545</b> |                | <b>0.0545</b> | <b>0.0545</b> | <b>860.1111</b> | <b>860.1111</b> | <b>0.0165</b> | <b>0.0158</b> | <b>865.2223</b> |      |

**6.0 Area Detail****6.1 Mitigation Measures Area**

No Hearths Installed

## Jefferson Oceanside Mixed Use Development - San Diego 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   | 8.1944 | 0.2804 | 24.3533 | 1.2900e-003 |               | 0.1351       | 0.1351     |                | 0.1351        | 0.1351      | 0.0000   | 43.9057   | 43.9057   | 0.0422 | 0.0000 | 44.9602 |  |
| Unmitigated | 8.1944 | 0.2804 | 24.3533 | 1.2900e-003 |               | 0.1351       | 0.1351     |                | 0.1351        | 0.1351      | 0.0000   | 43.9057   | 43.9057   | 0.0422 | 0.0000 | 44.9602 |  |

**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 | 1.0305 |        |         |             |               | 0.0000       | 0.0000     |                | 0.0000        | 0.0000      | 0.0000   |           |           |        |        | 0.0000  |
| Consumer Products     | 6.4303 |        |         |             |               | 0.0000       | 0.0000     |                | 0.0000        | 0.0000      | 0.0000   |           |           |        |        | 0.0000  |
| Hearth                | 0.0000 | 0.0000 | 0.0000  | 0.0000      |               | 0.0000       | 0.0000     |                | 0.0000        | 0.0000      | 0.0000   |           |           |        |        | 0.0000  |
| Landscaping           | 0.7336 | 0.2804 | 24.3533 | 1.2900e-003 |               | 0.1351       | 0.1351     |                | 0.1351        | 0.1351      | 0.0000   | 43.9057   | 43.9057   | 0.0422 |        | 44.9602 |
| Total                 | 8.1944 | 0.2804 | 24.3533 | 1.2900e-003 |               | 0.1351       | 0.1351     |                | 0.1351        | 0.1351      | 0.0000   | 43.9057   | 43.9057   | 0.0422 | 0.0000 | 44.9602 |

## Jefferson Oceanside Mixed Use Development - San Diego 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 | 1.0305        |               |                |                    |               |              | 0.0000        | 0.0000         |               | 0.0000        | 0.0000        |           | 0.0000        |                |                | 0.0000        |               |                |
| Consumer Products     | 6.4303        |               |                |                    |               |              | 0.0000        | 0.0000         |               | 0.0000        | 0.0000        |           | 0.0000        |                |                | 0.0000        |               |                |
| Hearth                | 0.0000        | 0.0000        | 0.0000         | 0.0000             |               |              | 0.0000        | 0.0000         |               | 0.0000        | 0.0000        |           | 0.0000        | 0.0000         | 0.0000         | 0.0000        |               |                |
| Landscaping           | 0.7336        | 0.2804        | 24.3533        | 1.2900e-003        |               |              | 0.1351        | 0.1351         |               | 0.1351        | 0.1351        |           | 43.9057       | 43.9057        | 0.0422         |               | 44.9602       |                |
| <b>Total</b>          | <b>8.1944</b> | <b>0.2804</b> | <b>24.3533</b> | <b>1.2900e-003</b> |               |              | <b>0.1351</b> | <b>0.1351</b>  |               | <b>0.1351</b> | <b>0.1351</b> |           | <b>0.0000</b> | <b>43.9057</b> | <b>43.9057</b> | <b>0.0422</b> | <b>0.0000</b> | <b>44.9602</b> |

**7.0 Water Detail****7.1 Mitigation Measures Water**

Apply Water Conservation Strategy

## Jefferson Oceanside Mixed Use Development - San Diego 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**

Institute Recycling and Composting Services

**9.0 Operational Offroad**

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

**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 |
|----------------|--------|----------------|-----------------|---------------|-----------|
|----------------|--------|----------------|-----------------|---------------|-----------|

**User Defined Equipment**

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

**11.0 Vegetation**

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## Jefferson Oceanside Mixed Use Development - San Diego County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied****Jefferson Oceanside Mixed Use Development**

San Diego County, Annual

**1.0 Project Characteristics****1.1 Land Usage**

| Land Uses                           | Size   | Metric        | Lot Acreage | Floor Surface Area | Population |
|-------------------------------------|--------|---------------|-------------|--------------------|------------|
| Parking Lot                         | 375.00 | Space         | 3.37        | 150,000.00         | 0          |
| Fast Food Restaurant w/o Drive Thru | 3.00   | 1000sqft      | 0.07        | 3,000.00           | 0          |
| Apartments Mid Rise                 | 295.00 | Dwelling Unit | 15.48       | 295,000.00         | 844        |

**1.2 Other Project Characteristics**

|                            |                          |                            |       |                            |       |
|----------------------------|--------------------------|----------------------------|-------|----------------------------|-------|
| Urbanization               | Urban                    | Wind Speed (m/s)           | 2.6   | Precipitation Freq (Days)  | 40    |
| Climate Zone               | 13                       |                            |       | Operational Year           | 2026  |
| Utility Company            | San Diego Gas & Electric |                            |       |                            |       |
| CO2 Intensity<br>(lb/MWhr) | 409.42                   | CH4 Intensity<br>(lb/MWhr) | 0.025 | N2O Intensity<br>(lb/MWhr) | 0.003 |

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

## Project Characteristics - RPS 2026

Land Use - Project Site is 18.85 acres - Developed Area is 9.91 Acres. Total Parking is 91 Garage Spaces within facility footprint and 375 parking space outside facility footprint made up of carports and surface parking

Construction Phase - Construction Schedule

Off-road Equipment -

Trips and VMT -

Grading -

Architectural Coating - Rule 67 Paint

Vehicle Trips - Trip Generation and VMT from Project Traffic Study.

Vehicle Emission Factors -

## Jefferson Oceanside Mixed Use Development - San Diego County, Annual

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

Vehicle Emission Factors -

Vehicle Emission Factors -

Woodstoves - No hearth options

Area Coating - Rule 67 Paint

Energy Use -

Solid Waste -

Construction Off-road Equipment Mitigation - T3 with DPF

Mobile Land Use Mitigation -

Area Mitigation -

Energy Mitigation -

Water Mitigation -

Waste Mitigation -

Fleet Mix -

| Table Name              | Column Name                     | Default Value | New Value |
|-------------------------|---------------------------------|---------------|-----------|
| tblArchitecturalCoating | EF_Nonresidential_Exterior      | 250.00        | 100.00    |
| tblArchitecturalCoating | EF_Nonresidential_Interior      | 250.00        | 100.00    |
| tblArchitecturalCoating | EF_Parking                      | 250.00        | 100.00    |
| tblArchitecturalCoating | EF_Residential_Exterior         | 250.00        | 100.00    |
| tblArchitecturalCoating | EF_Residential_Interior         | 250.00        | 100.00    |
| tblAreaCoating          | Area_EF_Nonresidential_Exterior | 250           | 100       |
| tblAreaCoating          | Area_EF_Nonresidential_Interior | 250           | 100       |
| tblAreaCoating          | Area_EF_Parking                 | 250           | 100       |
| tblAreaCoating          | Area_EF_Residential_Exterior    | 250           | 100       |
| tblAreaCoating          | Area_EF_Residential_Interior    | 250           | 100       |
| tblConstEquipMitigation | DPF                             | No Change     | Level 3   |
| tblConstEquipMitigation | DPF                             | No Change     | Level 3   |
| tblConstEquipMitigation | DPF                             | No Change     | Level 3   |
| tblConstEquipMitigation | DPF                             | No Change     | Level 3   |

Jefferson Oceanside Mixed Use Development - San Diego County, Annual

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

## Jefferson Oceanside Mixed Use Development - San Diego County, Annual

**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    |
| tblConstructionPhase      | NumDays            | 10.00     | 20.00     |
| tblConstructionPhase      | NumDays            | 30.00     | 45.00     |
| tblConstructionPhase      | NumDays            | 20.00     | 35.00     |
| tblConstructionPhase      | NumDays            | 300.00    | 440.00    |
| tblConstructionPhase      | NumDays            | 20.00     | 61.00     |
| tblFireplaces             | NumberGas          | 162.25    | 0.00      |
| tblFireplaces             | NumberNoFireplace  | 29.50     | 0.00      |
| tblFireplaces             | NumberWood         | 103.25    | 0.00      |
| tblGrading                | MaterialExported   | 0.00      | 10,100.00 |
| tblLandUse                | LotAcreage         | 7.76      | 15.48     |
| tblProjectCharacteristics | CH4IntensityFactor | 0.033     | 0.025     |
| tblProjectCharacteristics | CO2IntensityFactor | 539.98    | 409.42    |
| tblProjectCharacteristics | N2OIntensityFactor | 0.004     | 0.003     |
| tblVehicleTrips           | CC_TL              | 7.30      | 0.13      |
| tblVehicleTrips           | CC_TTP             | 79.50     | 100.00    |
| tblVehicleTrips           | CNW_TL             | 7.30      | 0.00      |
| tblVehicleTrips           | CNW_TTP            | 19.00     | 0.00      |
| tblVehicleTrips           | CW_TL              | 9.50      | 0.00      |
| tblVehicleTrips           | CW_TTP             | 1.50      | 0.00      |
| tblVehicleTrips           | DV_TP              | 11.00     | 0.00      |
| tblVehicleTrips           | DV_TP              | 37.00     | 0.00      |
| tblVehicleTrips           | HO_TL              | 7.50      | 0.00      |
| tblVehicleTrips           | HO_TTP             | 39.60     | 0.00      |

## Jefferson Oceanside Mixed Use Development - San Diego County, Annual

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

|                 |                    |        |        |
|-----------------|--------------------|--------|--------|
| tblVehicleTrips | HS_TL              | 7.30   | 0.00   |
| tblVehicleTrips | HS_TTP             | 18.80  | 0.00   |
| tblVehicleTrips | HW_TL              | 10.80  | 5.92   |
| tblVehicleTrips | HW_TTP             | 41.60  | 100.00 |
| tblVehicleTrips | PB_TP              | 3.00   | 0.00   |
| tblVehicleTrips | PB_TP              | 12.00  | 0.00   |
| tblVehicleTrips | PR_TP              | 86.00  | 100.00 |
| tblVehicleTrips | PR_TP              | 51.00  | 100.00 |
| tblVehicleTrips | ST_TR              | 4.91   | 6.00   |
| tblVehicleTrips | ST_TR              | 696.00 | 700.00 |
| tblVehicleTrips | SU_TR              | 4.09   | 6.00   |
| tblVehicleTrips | SU_TR              | 500.00 | 700.00 |
| tblVehicleTrips | WD_TR              | 5.44   | 6.00   |
| tblVehicleTrips | WD_TR              | 346.23 | 700.00 |
| tblWoodstoves   | NumberCatalytic    | 14.75  | 0.00   |
| tblWoodstoves   | NumberNoncatalytic | 14.75  | 0.00   |

**2.0 Emissions Summary**

## Jefferson Oceanside Mixed Use Development - San Diego County, Annual

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

|         | ROG     | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4    | N2O         | CO2e     |  |
|---------|---------|--------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|--------|-------------|----------|--|
| Year    | tons/yr |        |        |             |               |              |            |                |               |             | MT/yr    |           |           |        |             |          |  |
| 2023    | 0.1384  | 1.3960 | 1.2176 | 2.8800e-003 | 0.4340        | 0.0577       | 0.4917     | 0.1914         | 0.0531        | 0.2445      | 0.0000   | 258.4222  | 258.4222  | 0.0668 | 7.1500e-003 | 262.2230 |  |
| 2024    | 0.2935  | 2.1515 | 3.0081 | 7.4600e-003 | 0.3406        | 0.0838       | 0.4244     | 0.0916         | 0.0789        | 0.1705      | 0.0000   | 678.2413  | 678.2413  | 0.0827 | 0.0273      | 688.4529 |  |
| 2025    | 2.0668  | 1.3372 | 1.9906 | 4.9400e-003 | 0.2331        | 0.0484       | 0.2816     | 0.0627         | 0.0456        | 0.1083      | 0.0000   | 450.1985  | 450.1985  | 0.0535 | 0.0174      | 456.7154 |  |
| Maximum | 2.0668  | 2.1515 | 3.0081 | 7.4600e-003 | 0.4340        | 0.0838       | 0.4917     | 0.1914         | 0.0789        | 0.2445      | 0.0000   | 678.2413  | 678.2413  | 0.0827 | 0.0273      | 688.4529 |  |

**Mitigated Construction**

|         | ROG     | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4    | N2O         | CO2e     |  |
|---------|---------|--------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|--------|-------------|----------|--|
| Year    | tons/yr |        |        |             |               |              |            |                |               |             | MT/yr    |           |           |        |             |          |  |
| 2023    | 0.0683  | 1.2280 | 1.5147 | 2.8800e-003 | 0.4340        | 8.8800e-003  | 0.4429     | 0.1914         | 8.8400e-003   | 0.2002      | 0.0000   | 258.4219  | 258.4219  | 0.0668 | 7.1500e-003 | 262.2228 |  |
| 2024    | 0.1890  | 2.2540 | 3.2317 | 7.4600e-003 | 0.3406        | 0.0213       | 0.3618     | 0.0916         | 0.0210        | 0.1127      | 0.0000   | 678.2409  | 678.2409  | 0.0827 | 0.0273      | 688.4525 |  |
| 2025    | 2.0048  | 1.4920 | 2.1425 | 4.9400e-003 | 0.2331        | 0.0142       | 0.2473     | 0.0627         | 0.0140        | 0.0767      | 0.0000   | 450.1982  | 450.1982  | 0.0535 | 0.0174      | 456.7152 |  |
| Maximum | 2.0048  | 2.2540 | 3.2317 | 7.4600e-003 | 0.4340        | 0.0213       | 0.4429     | 0.1914         | 0.0210        | 0.2002      | 0.0000   | 678.2409  | 678.2409  | 0.0827 | 0.0273      | 688.4525 |  |

## Jefferson Oceanside Mixed Use Development - San Diego County, Annual

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

|                   | ROG  | NOx   | CO     | SO2  | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4  | N20  | CO2e |
|-------------------|------|-------|--------|------|---------------|--------------|------------|----------------|---------------|-------------|----------|----------|-----------|------|------|------|
| Percent Reduction | 9.47 | -1.83 | -10.82 | 0.00 | 0.00          | 76.68        | 12.16      | 0.00           | 75.28         | 25.56       | 0.00     | 0.00     | 0.00      | 0.00 | 0.00 | 0.00 |

| Quarter | Start Date | End Date   | Maximum Unmitigated ROG + NOX (tons/quarter) | Maximum Mitigated ROG + NOX (tons/quarter) |
|---------|------------|------------|--|--|
| 1       | 8-1-2023   | 10-31-2023 | 1.2458                                       | 1.0016                                     |
| 2       | 11-1-2023  | 1-31-2024  | 0.4982                                       | 0.5039                                     |
| 3       | 2-1-2024   | 4-30-2024  | 0.6006                                       | 0.6001                                     |
| 4       | 5-1-2024   | 7-31-2024  | 0.6092                                       | 0.6087                                     |
| 5       | 8-1-2024   | 10-31-2024 | 0.6116                                       | 0.6111                                     |
| 6       | 11-1-2024  | 1-31-2025  | 0.6031                                       | 0.6145                                     |
| 7       | 2-1-2025   | 4-30-2025  | 0.5561                                       | 0.5899                                     |
| 8       | 5-1-2025   | 7-31-2025  | 1.9469                                       | 1.9840                                     |
| 9       | 8-1-2025   | 9-30-2025  | 0.7191                                       | 0.7295                                     |
|         |            | Highest    | 1.9469                                       | 1.9840                                     |

## Jefferson Oceanside Mixed Use Development - San Diego County, Annual

**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     | tons/yr       |               |                |               |               |               |               |                |               |               |                |                   |                   |               |               | MT/yr             |  |
| Area         | 1.4276        | 0.0252        | 2.1918         | 1.2000e-004   |               | 0.0122        | 0.0122        |                | 0.0122        | 0.0122        | 0.0000         | 3.5848            | 3.5848            | 3.4400e-003   | 0.0000        | 3.6709            |  |
| Energy       | 0.0144        | 0.1245        | 0.0636         | 7.8000e-004   |               | 9.9400e-003   | 9.9400e-003   |                | 9.9400e-003   | 9.9400e-003   | 0.0000         | 383.6012          | 383.6012          | 0.0175        | 4.3800e-003   | 385.3423          |  |
| Mobile       | 1.1839        | 0.9505        | 8.2557         | 0.0134        | 1.4639        | 0.0115        | 1.4754        | 0.3907         | 0.0108        | 0.4014        | 0.0000         | 1,281.0504        | 1,281.0504        | 0.1283        | 0.0755        | 1,306.7640        |  |
| Waste        |               |               |                |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 34.5612        | 0.0000            | 34.5612           | 2.0425        | 0.0000        | 85.6240           |  |
| Water        |               |               |                |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 6.3867         | 73.8000           | 80.1867           | 0.6605        | 0.0160        | 101.4754          |  |
| <b>Total</b> | <b>2.6259</b> | <b>1.1002</b> | <b>10.5110</b> | <b>0.0143</b> | <b>1.4639</b> | <b>0.0336</b> | <b>1.4975</b> | <b>0.3907</b>  | <b>0.0328</b> | <b>0.4235</b> | <b>40.9479</b> | <b>1,742.0364</b> | <b>1,782.9843</b> | <b>2.8522</b> | <b>0.0959</b> | <b>1,882.8765</b> |  |

## Jefferson Oceanside Mixed Use Development - San Diego County, Annual

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

|              | ROG           | NOx           | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2       | NBio- CO2         | Total CO2         | CH4           | N2O           | CO2e              |
|--------------|---------------|---------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------------|-------------------|-------------------|---------------|---------------|-------------------|
| Category     | tons/yr       |               |                |               |               |               |               |                |               |               | MT/yr          |                   |                   |               |               |                   |
| Area         | 1.4276        | 0.0252        | 2.1918         | 1.2000e-004   |               | 0.0122        | 0.0122        |                | 0.0122        | 0.0122        | 0.0000         | 3.5848            | 3.5848            | 3.4400e-003   | 0.0000        | 3.6709            |
| Energy       | 0.0144        | 0.1245        | 0.0636         | 7.8000e-004   |               | 9.9400e-003   | 9.9400e-003   |                | 9.9400e-003   | 9.9400e-003   | 0.0000         | 348.4060          | 348.4060          | 0.0153        | 4.1200e-003   | 350.0165          |
| Mobile       | 1.1839        | 0.9505        | 8.2557         | 0.0134        | 1.4639        | 0.0115        | 1.4754        | 0.3907         | 0.0108        | 0.4014        | 0.0000         | 1,281.0504        | 1,281.0504        | 0.1283        | 0.0755        | 1,306.7640        |
| Waste        |               |               |                |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 17.2806        | 0.0000            | 17.2806           | 1.0213        | 0.0000        | 42.8120           |
| Water        |               |               |                |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 5.1093         | 59.0400           | 64.1494           | 0.5284        | 0.0128        | 81.1804           |
| <b>Total</b> | <b>2.6259</b> | <b>1.1002</b> | <b>10.5110</b> | <b>0.0143</b> | <b>1.4639</b> | <b>0.0336</b> | <b>1.4975</b> | <b>0.3907</b>  | <b>0.0328</b> | <b>0.4235</b> | <b>22.3899</b> | <b>1,692.0812</b> | <b>1,714.4711</b> | <b>1.6967</b> | <b>0.0925</b> | <b>1,784.4437</b> |

|                   | ROG  | NOx  | CO   | SO2  | 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        | 45.32    | 2.87     | 3.84      | 40.51 | 3.62 | 5.23 |

**3.0 Construction Detail****Construction Phase**

| Phase Number | Phase Name       | Phase Type       | Start Date | End Date   | Num Days Week | Num Days | Phase Description |
|--------------|------------------|------------------|------------|------------|---------------|----------|-------------------|
| 1            | Site Preparation | Site Preparation | 8/1/2023   | 8/28/2023  | 5             | 20       |                   |
| 2            | Grading          | Grading          | 8/29/2023  | 10/30/2023 | 5             | 45       |                   |
| 3            | Paving           | Paving           | 10/31/2023 | 12/18/2023 | 5             | 35       |                   |

## Jefferson Oceanside Mixed Use Development - San Diego County, Annual

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

|   |                       |                       |            |           |   |     |
|---|-----------------------|-----------------------|------------|-----------|---|-----|
| 4 | Building Construction | Building Construction | 12/19/2023 | 8/25/2025 | 5 | 440 |
| 5 | Architectural Coating | Architectural Coating | 6/1/2025   | 8/25/2025 | 5 | 61  |

**Acres of Grading (Site Preparation Phase): 30**

**Acres of Grading (Grading Phase): 135**

**Acres of Paving: 3.37**

**Residential Indoor: 597,375; Residential Outdoor: 199,125; Non-Residential Indoor: 4,500; Non-Residential Outdoor: 1,500; Striped Parking Area: 9,000 (Architectural Coating – sqft)**

**OffRoad Equipment**

| Phase Name            | Offroad Equipment Type    | Amount | Usage Hours | Horse Power | Load Factor |
|-----------------------|---------------------------|--------|-------------|-------------|-------------|
| Site Preparation      | Rubber Tired Dozers       | 3      | 8.00        | 247         | 0.40        |
| Site Preparation      | Tractors/Loaders/Backhoes | 4      | 8.00        | 97          | 0.37        |
| Grading               | Excavators                | 2      | 8.00        | 158         | 0.38        |
| Grading               | Graders                   | 1      | 8.00        | 187         | 0.41        |
| Grading               | Rubber Tired Dozers       | 1      | 8.00        | 247         | 0.40        |
| Grading               | Scrapers                  | 2      | 8.00        | 367         | 0.48        |
| Grading               | Tractors/Loaders/Backhoes | 2      | 8.00        | 97          | 0.37        |
| Paving                | Pavers                    | 2      | 8.00        | 130         | 0.42        |
| Paving                | Paving Equipment          | 2      | 8.00        | 132         | 0.36        |
| Paving                | Rollers                   | 2      | 8.00        | 80          | 0.38        |
| Building Construction | Cranes                    | 1      | 7.00        | 231         | 0.29        |
| Building Construction | Forklifts                 | 3      | 8.00        | 89          | 0.20        |
| Building Construction | Generator Sets            | 1      | 8.00        | 84          | 0.74        |
| Building Construction | Tractors/Loaders/Backhoes | 3      | 7.00        | 97          | 0.37        |
| Building Construction | Welders                   | 1      | 8.00        | 46          | 0.45        |
| Architectural Coating | Air Compressors           | 1      | 6.00        | 78          | 0.48        |

**Trips and VMT**

## Jefferson Oceanside Mixed Use Development - San Diego County, Annual

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

| Phase Name            | Offroad Equipment Count | Worker Trip Number | Vendor Trip Number | Hauling Trip Number | Worker Trip Length | Vendor Trip Length | Hauling Trip Length | Worker Vehicle Class | Vendor Vehicle Class | Hauling Vehicle Class |
|-----------------------|-------------------------|--------------------|--------------------|---------------------|--------------------|--------------------|---------------------|----------------------|----------------------|-----------------------|
| Site Preparation      | 7                       | 18.00              | 0.00               | 0.00                | 10.80              | 7.30               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Grading               | 8                       | 20.00              | 0.00               | 1,263.00            | 10.80              | 7.30               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Paving                | 6                       | 15.00              | 0.00               | 0.00                | 10.80              | 7.30               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Building Construction | 9                       | 277.00             | 57.00              | 0.00                | 10.80              | 7.30               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Architectural Coating | 1                       | 55.00              | 0.00               | 0.00                | 10.80              | 7.30               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |

**3.1 Mitigation Measures Construction**

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

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

|               | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2      | Total CO2      | CH4           | N2O           | CO2e           |
|---------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|----------------|----------------|---------------|---------------|----------------|
| Category      | tons/yr       |               |               |                    |               |               |               |                |               |               | MT/yr         |                |                |               |               |                |
| Fugitive Dust |               |               |               |                    | 0.1966        | 0.0000        | 0.1966        | 0.1010         | 0.0000        | 0.1010        | 0.0000        | 0.0000         | 0.0000         | 0.0000        | 0.0000        | 0.0000         |
| Off-Road      | 0.0266        | 0.2752        | 0.1824        | 3.8000e-004        | 0.0127        | 0.0127        |               | 0.0117         | 0.0117        | 0.0000        | 33.4507       | 33.4507        | 0.0108         | 0.0000        | 33.7212       |                |
| <b>Total</b>  | <b>0.0266</b> | <b>0.2752</b> | <b>0.1824</b> | <b>3.8000e-004</b> | <b>0.1966</b> | <b>0.0127</b> | <b>0.2092</b> | <b>0.1010</b>  | <b>0.0117</b> | <b>0.1127</b> | <b>0.0000</b> | <b>33.4507</b> | <b>33.4507</b> | <b>0.0108</b> | <b>0.0000</b> | <b>33.7212</b> |

## Jefferson Oceanside Mixed Use Development - San Diego County, Annual

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

|              | ROG                | NOx                | CO                 | SO2                | Fugitive PM10      | Exhaust PM10       | PM10 Total         | Fugitive PM2.5     | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2     | Total CO2     | CH4                | N2O                | CO2e          |  |
|--------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|--------------------|---------------|--|
| Category     | tons/yr            |                    |                    |                    |                    |                    |                    |                    |                    |                    |               | MT/yr         |               |                    |                    |               |  |
| Hauling      | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000             | 0.0000        |  |
| Vendor       | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000             | 0.0000        |  |
| Worker       | 4.9000e-004        | 3.4000e-004        | 4.1100e-003        | 1.0000e-005        | 1.4400e-003        | 1.0000e-005        | 1.4500e-003        | 3.8000e-004        | 1.0000e-005        | 3.9000e-004        | 0.0000        | 1.1565        | 1.1565        | 3.0000e-005        | 3.0000e-005        | 1.1669        |  |
| <b>Total</b> | <b>4.9000e-004</b> | <b>3.4000e-004</b> | <b>4.1100e-003</b> | <b>1.0000e-005</b> | <b>1.4400e-003</b> | <b>1.0000e-005</b> | <b>1.4500e-003</b> | <b>3.8000e-004</b> | <b>1.0000e-005</b> | <b>3.9000e-004</b> | <b>0.0000</b> | <b>1.1565</b> | <b>1.1565</b> | <b>3.0000e-005</b> | <b>3.0000e-005</b> | <b>1.1669</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      | tons/yr            |               |               |                    |               |                    |               |                |                    |               | MT/yr         |                |                |               |               |                |
| Fugitive Dust |                    |               |               |                    | 0.1966        | 0.0000             | 0.1966        | 0.1010         | 0.0000             | 0.1010        | 0.0000        | 0.0000         | 0.0000         | 0.0000        | 0.0000        | 0.0000         |
| Off-Road      | 9.3100e-003        | 0.1907        | 0.2296        | 3.8000e-004        |               | 1.4200e-003        | 1.4200e-003   |                | 1.4200e-003        | 1.4200e-003   | 0.0000        | 33.4507        | 33.4507        | 0.0108        | 0.0000        | 33.7211        |
| <b>Total</b>  | <b>9.3100e-003</b> | <b>0.1907</b> | <b>0.2296</b> | <b>3.8000e-004</b> | <b>0.1966</b> | <b>1.4200e-003</b> | <b>0.1980</b> | <b>0.1010</b>  | <b>1.4200e-003</b> | <b>0.1024</b> | <b>0.0000</b> | <b>33.4507</b> | <b>33.4507</b> | <b>0.0108</b> | <b>0.0000</b> | <b>33.7211</b> |

## Jefferson Oceanside Mixed Use Development - San Diego County, Annual

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

|              | ROG                | NOx                | CO                 | SO2                | Fugitive PM10      | Exhaust PM10       | PM10 Total         | Fugitive PM2.5     | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2     | Total CO2     | CH4                | N2O                | CO2e          |  |
|--------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|--------------------|---------------|--|
| Category     | tons/yr            |                    |                    |                    |                    |                    |                    |                    |                    |                    |               | MT/yr         |               |                    |                    |               |  |
| Hauling      | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000             | 0.0000        |  |
| Vendor       | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000             | 0.0000        |  |
| Worker       | 4.9000e-004        | 3.4000e-004        | 4.1100e-003        | 1.0000e-005        | 1.4400e-003        | 1.0000e-005        | 1.4500e-003        | 3.8000e-004        | 1.0000e-005        | 3.9000e-004        | 0.0000        | 1.1565        | 1.1565        | 3.0000e-005        | 3.0000e-005        | 1.1669        |  |
| <b>Total</b> | <b>4.9000e-004</b> | <b>3.4000e-004</b> | <b>4.1100e-003</b> | <b>1.0000e-005</b> | <b>1.4400e-003</b> | <b>1.0000e-005</b> | <b>1.4500e-003</b> | <b>3.8000e-004</b> | <b>1.0000e-005</b> | <b>3.9000e-004</b> | <b>0.0000</b> | <b>1.1565</b> | <b>1.1565</b> | <b>3.0000e-005</b> | <b>3.0000e-005</b> | <b>1.1669</b> |  |

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

|               | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2       | Total CO2       | CH4           | N2O           | CO2e            |
|---------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-----------------|-----------------|---------------|---------------|-----------------|
| Category      | tons/yr       |               |               |                    |               |               |               |                |               |               | MT/yr         |                 |                 |               |               |                 |
| Fugitive Dust |               |               |               |                    | 0.2078        | 0.0000        | 0.2078        | 0.0823         | 0.0000        | 0.0823        | 0.0000        | 0.0000          | 0.0000          | 0.0000        | 0.0000        | 0.0000          |
| Off-Road      | 0.0747        | 0.7766        | 0.6312        | 1.4000e-003        |               | 0.0321        | 0.0321        |                | 0.0295        | 0.0295        | 0.0000        | 122.7042        | 122.7042        | 0.0397        | 0.0000        | 123.6964        |
| <b>Total</b>  | <b>0.0747</b> | <b>0.7766</b> | <b>0.6312</b> | <b>1.4000e-003</b> | <b>0.2078</b> | <b>0.0321</b> | <b>0.2398</b> | <b>0.0823</b>  | <b>0.0295</b> | <b>0.1118</b> | <b>0.0000</b> | <b>122.7042</b> | <b>122.7042</b> | <b>0.0397</b> | <b>0.0000</b> | <b>123.6964</b> |

## Jefferson Oceanside Mixed Use Development - San Diego County, Annual

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

|              | ROG                | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5     | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2      | Total CO2      | CH4                | N2O                | CO2e           |
|--------------|--------------------|---------------|---------------|--------------------|---------------|--------------------|---------------|--------------------|--------------------|--------------------|---------------|----------------|----------------|--------------------|--------------------|----------------|
| Category     | tons/yr            |               |               |                    |               |                    |               |                    |                    |                    | MT/yr         |                |                |                    |                    |                |
| Hauling      | 1.3900e-003        | 0.0857        | 0.0228        | 3.8000e-004        | 0.0108        | 7.0000e-004        | 0.0115        | 2.9700e-003        | 6.7000e-004        | 3.6400e-003        | 0.0000        | 37.8992        | 37.8992        | 1.9100e-003        | 6.0300e-003        | 39.7430        |
| Vendor       | 0.0000             | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000         | 0.0000         | 0.0000             | 0.0000             | 0.0000         |
| Worker       | 1.2200e-003        | 8.4000e-004   | 0.0103        | 3.0000e-005        | 3.6100e-003   | 2.0000e-005        | 3.6300e-003   | 9.6000e-004        | 2.0000e-005        | 9.8000e-004        | 0.0000        | 2.8913         | 2.8913         | 8.0000e-005        | 8.0000e-005        | 2.9171         |
| <b>Total</b> | <b>2.6100e-003</b> | <b>0.0866</b> | <b>0.0331</b> | <b>4.1000e-004</b> | <b>0.0144</b> | <b>7.2000e-004</b> | <b>0.0152</b> | <b>3.9300e-003</b> | <b>6.9000e-004</b> | <b>4.6200e-003</b> | <b>0.0000</b> | <b>40.7904</b> | <b>40.7904</b> | <b>1.9900e-003</b> | <b>6.1100e-003</b> | <b>42.6601</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      | tons/yr       |               |               |                    |               |                    |               |                |                    |               | MT/yr         |                 |                 |               |               |                 |
| Fugitive Dust |               |               |               |                    | 0.2078        | 0.0000             | 0.2078        | 0.0823         | 0.0000             | 0.0823        | 0.0000        | 0.0000          | 0.0000          | 0.0000        | 0.0000        | 0.0000          |
| Off-Road      | 0.0343        | 0.6745        | 0.8263        | 1.4000e-003        |               | 4.3900e-003        | 4.3900e-003   |                | 4.3900e-003        | 4.3900e-003   | 0.0000        | 122.7041        | 122.7041        | 0.0397        | 0.0000        | 123.6962        |
| <b>Total</b>  | <b>0.0343</b> | <b>0.6745</b> | <b>0.8263</b> | <b>1.4000e-003</b> | <b>0.2078</b> | <b>4.3900e-003</b> | <b>0.2122</b> | <b>0.0823</b>  | <b>4.3900e-003</b> | <b>0.0867</b> | <b>0.0000</b> | <b>122.7041</b> | <b>122.7041</b> | <b>0.0397</b> | <b>0.0000</b> | <b>123.6962</b> |

## Jefferson Oceanside Mixed Use Development - San Diego County, Annual

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

|              | ROG                | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5     | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2      | Total CO2      | CH4                | N2O                | CO2e           |
|--------------|--------------------|---------------|---------------|--------------------|---------------|--------------------|---------------|--------------------|--------------------|--------------------|---------------|----------------|----------------|--------------------|--------------------|----------------|
| Category     | tons/yr            |               |               |                    |               |                    |               |                    |                    |                    | MT/yr         |                |                |                    |                    |                |
| Hauling      | 1.3900e-003        | 0.0857        | 0.0228        | 3.8000e-004        | 0.0108        | 7.0000e-004        | 0.0115        | 2.9700e-003        | 6.7000e-004        | 3.6400e-003        | 0.0000        | 37.8992        | 37.8992        | 1.9100e-003        | 6.0300e-003        | 39.7430        |
| Vendor       | 0.0000             | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000         | 0.0000         | 0.0000             | 0.0000             | 0.0000         |
| Worker       | 1.2200e-003        | 8.4000e-004   | 0.0103        | 3.0000e-005        | 3.6100e-003   | 2.0000e-005        | 3.6300e-003   | 9.6000e-004        | 2.0000e-005        | 9.8000e-004        | 0.0000        | 2.8913         | 2.8913         | 8.0000e-005        | 8.0000e-005        | 2.9171         |
| <b>Total</b> | <b>2.6100e-003</b> | <b>0.0866</b> | <b>0.0331</b> | <b>4.1000e-004</b> | <b>0.0144</b> | <b>7.2000e-004</b> | <b>0.0152</b> | <b>3.9300e-003</b> | <b>6.9000e-004</b> | <b>4.6200e-003</b> | <b>0.0000</b> | <b>40.7904</b> | <b>40.7904</b> | <b>1.9900e-003</b> | <b>6.1100e-003</b> | <b>42.6601</b> |

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

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total         | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2      | Total CO2      | CH4           | N2O           | CO2e           |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|---------------|----------------|----------------|---------------|---------------|----------------|
| Category     | tons/yr       |               |               |                    |               |                    |                    |                |                    |                    | MT/yr         |                |                |               |               |                |
| Off-Road     | 0.0181        | 0.1784        | 0.2552        | 4.0000e-004        |               | 8.9300e-003        | 8.9300e-003        |                | 8.2100e-003        | 8.2100e-003        | 0.0000        | 35.0470        | 35.0470        | 0.0113        | 0.0000        | 35.3304        |
| Paving       | 4.4100e-003   |               |               |                    |               | 0.0000             | 0.0000             |                | 0.0000             | 0.0000             | 0.0000        | 0.0000         | 0.0000         | 0.0000        | 0.0000        | 0.0000         |
| <b>Total</b> | <b>0.0225</b> | <b>0.1784</b> | <b>0.2552</b> | <b>4.0000e-004</b> |               | <b>8.9300e-003</b> | <b>8.9300e-003</b> |                | <b>8.2100e-003</b> | <b>8.2100e-003</b> | <b>0.0000</b> | <b>35.0470</b> | <b>35.0470</b> | <b>0.0113</b> | <b>0.0000</b> | <b>35.3304</b> |

## Jefferson Oceanside Mixed Use Development - San Diego County, Annual

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

|              | ROG                | NOx                | CO                 | SO2                | Fugitive PM10      | Exhaust PM10       | PM10 Total         | Fugitive PM2.5     | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2     | Total CO2     | CH4                | N2O                | CO2e          |  |
|--------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|--------------------|---------------|--|
| Category     | tons/yr            |                    |                    |                    |                    |                    |                    |                    |                    |                    |               | MT/yr         |               |                    |                    |               |  |
| Hauling      | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000             | 0.0000        |  |
| Vendor       | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 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       | 7.1000e-004        | 4.9000e-004        | 6.0000e-003        | 2.0000e-005        | 2.1100e-003        | 1.0000e-005        | 2.1200e-003        | 5.6000e-004        | 1.0000e-005        | 5.7000e-004        | 0.0000        | 1.6866        | 1.6866        | 5.0000e-005        | 5.0000e-005        | 1.7017        |  |
| <b>Total</b> | <b>7.1000e-004</b> | <b>4.9000e-004</b> | <b>6.0000e-003</b> | <b>2.0000e-005</b> | <b>2.1100e-003</b> | <b>1.0000e-005</b> | <b>2.1200e-003</b> | <b>5.6000e-004</b> | <b>1.0000e-005</b> | <b>5.7000e-004</b> | <b>0.0000</b> | <b>1.6866</b> | <b>1.6866</b> | <b>5.0000e-005</b> | <b>5.0000e-005</b> | <b>1.7017</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     | tons/yr       |               |               |                    |               |                    |                    |                |                    |                    | MT/yr         |                |                |               |               |                |
| Off-Road     | 9.8200e-003   | 0.1977        | 0.3027        | 4.0000e-004        |               | 1.6000e-003        | 1.6000e-003        |                | 1.6000e-003        | 1.6000e-003        | 0.0000        | 35.0470        | 35.0470        | 0.0113        | 0.0000        | 35.3304        |
| Paving       | 4.4100e-003   |               |               |                    |               | 0.0000             | 0.0000             |                | 0.0000             | 0.0000             | 0.0000        | 0.0000         | 0.0000         | 0.0000        | 0.0000        | 0.0000         |
| <b>Total</b> | <b>0.0142</b> | <b>0.1977</b> | <b>0.3027</b> | <b>4.0000e-004</b> |               | <b>1.6000e-003</b> | <b>1.6000e-003</b> |                | <b>1.6000e-003</b> | <b>1.6000e-003</b> | <b>0.0000</b> | <b>35.0470</b> | <b>35.0470</b> | <b>0.0113</b> | <b>0.0000</b> | <b>35.3304</b> |

## Jefferson Oceanside Mixed Use Development - San Diego County, Annual

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

|              | ROG                | NOx                | CO                 | SO2                | Fugitive PM10      | Exhaust PM10       | PM10 Total         | Fugitive PM2.5     | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2     | Total CO2     | CH4                | N2O                | CO2e          |  |
|--------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|--------------------|---------------|--|
| Category     | tons/yr            |                    |                    |                    |                    |                    |                    |                    |                    |                    |               | MT/yr         |               |                    |                    |               |  |
| Hauling      | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000             | 0.0000        |  |
| Vendor       | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 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       | 7.1000e-004        | 4.9000e-004        | 6.0000e-003        | 2.0000e-005        | 2.1100e-003        | 1.0000e-005        | 2.1200e-003        | 5.6000e-004        | 1.0000e-005        | 5.7000e-004        | 0.0000        | 1.6866        | 1.6866        | 5.0000e-005        | 5.0000e-005        | 1.7017        |  |
| <b>Total</b> | <b>7.1000e-004</b> | <b>4.9000e-004</b> | <b>6.0000e-003</b> | <b>2.0000e-005</b> | <b>2.1100e-003</b> | <b>1.0000e-005</b> | <b>2.1200e-003</b> | <b>5.6000e-004</b> | <b>1.0000e-005</b> | <b>5.7000e-004</b> | <b>0.0000</b> | <b>1.6866</b> | <b>1.6866</b> | <b>5.0000e-005</b> | <b>5.0000e-005</b> | <b>1.7017</b> |  |

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

|              | ROG                | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total         | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2      | Total CO2      | CH4                | N2O           | CO2e           |
|--------------|--------------------|---------------|---------------|--------------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|---------------|----------------|----------------|--------------------|---------------|----------------|
| Category     | tons/yr            |               |               |                    |               |                    |                    |                |                    |                    | MT/yr         |                |                |                    |               |                |
| Off-Road     | 7.0800e-003        | 0.0647        | 0.0731        | 1.2000e-004        |               | 3.1500e-003        | 3.1500e-003        |                | 2.9600e-003        | 2.9600e-003        | 0.0000        | 10.4312        | 10.4312        | 2.4800e-003        | 0.0000        | 10.4933        |
| <b>Total</b> | <b>7.0800e-003</b> | <b>0.0647</b> | <b>0.0731</b> | <b>1.2000e-004</b> |               | <b>3.1500e-003</b> | <b>3.1500e-003</b> |                | <b>2.9600e-003</b> | <b>2.9600e-003</b> | <b>0.0000</b> | <b>10.4312</b> | <b>10.4312</b> | <b>2.4800e-003</b> | <b>0.0000</b> | <b>10.4933</b> |

## Jefferson Oceanside Mixed Use Development - San Diego County, Annual

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

|              | ROG                | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5     | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2      | Total CO2      | CH4                | N2O                | CO2e           |  |
|--------------|--------------------|---------------|---------------|--------------------|---------------|--------------------|---------------|--------------------|--------------------|--------------------|---------------|----------------|----------------|--------------------|--------------------|----------------|--|
| Category     | tons/yr            |               |               |                    |               |                    |               |                    |                    |                    |               | MT/yr          |                |                    |                    |                |  |
| Hauling      | 0.0000             | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000         | 0.0000         | 0.0000             | 0.0000             | 0.0000         |  |
| Vendor       | 3.0000e-004        | 0.0114        | 4.0200e-003   | 5.0000e-005        | 1.7000e-003   | 7.0000e-005        | 1.7700e-003   | 4.9000e-004        | 6.0000e-005        | 5.6000e-004        | 0.0000        | 5.1467         | 5.1467         | 1.6000e-004        | 7.5000e-004        | 5.3728         |  |
| Worker       | 3.3700e-003        | 2.3300e-003   | 0.0285        | 9.0000e-005        | 0.0100        | 6.0000e-005        | 0.0101        | 2.6600e-003        | 5.0000e-005        | 2.7100e-003        | 0.0000        | 8.0088         | 8.0088         | 2.3000e-004        | 2.2000e-004        | 8.0805         |  |
| <b>Total</b> | <b>3.6700e-003</b> | <b>0.0137</b> | <b>0.0325</b> | <b>1.4000e-004</b> | <b>0.0117</b> | <b>1.3000e-004</b> | <b>0.0118</b> | <b>3.1500e-003</b> | <b>1.1000e-004</b> | <b>3.2700e-003</b> | <b>0.0000</b> | <b>13.1555</b> | <b>13.1555</b> | <b>3.9000e-004</b> | <b>9.7000e-004</b> | <b>13.4533</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     | tons/yr            |               |               |                    |               |                    |                    |                |                    |                    | MT/yr         |                |                |                    |               |                |
| Off-Road     | 3.0300e-003        | 0.0640        | 0.0804        | 1.2000e-004        |               | 6.1000e-004        | 6.1000e-004        |                | 6.1000e-004        | 6.1000e-004        | 0.0000        | 10.4312        | 10.4312        | 2.4800e-003        | 0.0000        | 10.4932        |
| <b>Total</b> | <b>3.0300e-003</b> | <b>0.0640</b> | <b>0.0804</b> | <b>1.2000e-004</b> |               | <b>6.1000e-004</b> | <b>6.1000e-004</b> |                | <b>6.1000e-004</b> | <b>6.1000e-004</b> | <b>0.0000</b> | <b>10.4312</b> | <b>10.4312</b> | <b>2.4800e-003</b> | <b>0.0000</b> | <b>10.4932</b> |

## Jefferson Oceanside Mixed Use Development - San Diego County, Annual

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

|              | ROG                | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5     | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2      | Total CO2      | CH4                | N2O                | CO2e           |  |
|--------------|--------------------|---------------|---------------|--------------------|---------------|--------------------|---------------|--------------------|--------------------|--------------------|---------------|----------------|----------------|--------------------|--------------------|----------------|--|
| Category     | tons/yr            |               |               |                    |               |                    |               |                    |                    |                    |               | MT/yr          |                |                    |                    |                |  |
| Hauling      | 0.0000             | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000         | 0.0000         | 0.0000             | 0.0000             | 0.0000         |  |
| Vendor       | 3.0000e-004        | 0.0114        | 4.0200e-003   | 5.0000e-005        | 1.7000e-003   | 7.0000e-005        | 1.7700e-003   | 4.9000e-004        | 6.0000e-005        | 5.6000e-004        | 0.0000        | 5.1467         | 5.1467         | 1.6000e-004        | 7.5000e-004        | 5.3728         |  |
| Worker       | 3.3700e-003        | 2.3300e-003   | 0.0285        | 9.0000e-005        | 0.0100        | 6.0000e-005        | 0.0101        | 2.6600e-003        | 5.0000e-005        | 2.7100e-003        | 0.0000        | 8.0088         | 8.0088         | 2.3000e-004        | 2.2000e-004        | 8.0805         |  |
| <b>Total</b> | <b>3.6700e-003</b> | <b>0.0137</b> | <b>0.0325</b> | <b>1.4000e-004</b> | <b>0.0117</b> | <b>1.3000e-004</b> | <b>0.0118</b> | <b>3.1500e-003</b> | <b>1.1000e-004</b> | <b>3.2700e-003</b> | <b>0.0000</b> | <b>13.1555</b> | <b>13.1555</b> | <b>3.9000e-004</b> | <b>9.7000e-004</b> | <b>13.4533</b> |  |

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

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2       | Total CO2       | CH4           | N2O           | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-----------------|-----------------|---------------|---------------|-----------------|
| Category     | tons/yr       |               |               |                    |               |               |               |                |               |               | MT/yr         |                 |                 |               |               |                 |
| Off-Road     | 0.1928        | 1.7611        | 2.1179        | 3.5300e-003        | 0.0803        | 0.0803        | 0.0803        | 0.0756         | 0.0756        | 0.0756        | 0.0000        | 303.7223        | 303.7223        | 0.0718        | 0.0000        | 305.5179        |
| <b>Total</b> | <b>0.1928</b> | <b>1.7611</b> | <b>2.1179</b> | <b>3.5300e-003</b> | <b>0.0803</b> | <b>0.0803</b> | <b>0.0803</b> | <b>0.0756</b>  | <b>0.0756</b> | <b>0.0756</b> | <b>0.0000</b> | <b>303.7223</b> | <b>303.7223</b> | <b>0.0718</b> | <b>0.0000</b> | <b>305.5179</b> |

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

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2      | NBio- CO2       | Total CO2       | CH4           | N2O           | CO2e            |  |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|---------------|-----------------|-----------------|---------------|---------------|-----------------|--|
| Category     | tons/yr       |               |               |                    |               |                    |               |                |                    |               |               | MT/yr           |                 |               |               |                 |  |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        | 0.0000        | 0.0000          | 0.0000          | 0.0000        | 0.0000        | 0.0000          |  |
| Vendor       | 8.4300e-003   | 0.3292        | 0.1142        | 1.5000e-003        | 0.0496        | 1.9600e-003        | 0.0516        | 0.0143         | 1.8800e-003        | 0.0162        | 0.0000        | 147.2160        | 147.2160        | 4.6300e-003   | 0.0213        | 153.6878        |  |
| Worker       | 0.0923        | 0.0611        | 0.7760        | 2.4300e-003        | 0.2910        | 1.5300e-003        | 0.2925        | 0.0773         | 1.4100e-003        | 0.0787        | 0.0000        | 227.3029        | 227.3029        | 6.2200e-003   | 6.0000e-003   | 229.2472        |  |
| <b>Total</b> | <b>0.1007</b> | <b>0.3904</b> | <b>0.8902</b> | <b>3.9300e-003</b> | <b>0.3406</b> | <b>3.4900e-003</b> | <b>0.3441</b> | <b>0.0916</b>  | <b>3.2900e-003</b> | <b>0.0949</b> | <b>0.0000</b> | <b>374.5189</b> | <b>374.5189</b> | <b>0.0109</b> | <b>0.0273</b> | <b>382.9350</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     | tons/yr       |               |               |                    |               |               |               |                |               |               | MT/yr         |                 |                 |               |               |                 |
| Off-Road     | 0.0883        | 1.8636        | 2.3415        | 3.5300e-003        |               | 0.0178        | 0.0178        |                | 0.0178        | 0.0178        | 0.0000        | 303.7220        | 303.7220        | 0.0718        | 0.0000        | 305.5175        |
| <b>Total</b> | <b>0.0883</b> | <b>1.8636</b> | <b>2.3415</b> | <b>3.5300e-003</b> |               | <b>0.0178</b> | <b>0.0178</b> |                | <b>0.0178</b> | <b>0.0178</b> | <b>0.0000</b> | <b>303.7220</b> | <b>303.7220</b> | <b>0.0718</b> | <b>0.0000</b> | <b>305.5175</b> |

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

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2      | NBio- CO2       | Total CO2       | CH4           | N2O           | CO2e            |  |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|---------------|-----------------|-----------------|---------------|---------------|-----------------|--|
| Category     | tons/yr       |               |               |                    |               |                    |               |                |                    |               |               | MT/yr           |                 |               |               |                 |  |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        | 0.0000        | 0.0000          | 0.0000          | 0.0000        | 0.0000        | 0.0000          |  |
| Vendor       | 8.4300e-003   | 0.3292        | 0.1142        | 1.5000e-003        | 0.0496        | 1.9600e-003        | 0.0516        | 0.0143         | 1.8800e-003        | 0.0162        | 0.0000        | 147.2160        | 147.2160        | 4.6300e-003   | 0.0213        | 153.6878        |  |
| Worker       | 0.0923        | 0.0611        | 0.7760        | 2.4300e-003        | 0.2910        | 1.5300e-003        | 0.2925        | 0.0773         | 1.4100e-003        | 0.0787        | 0.0000        | 227.3029        | 227.3029        | 6.2200e-003   | 6.0000e-003   | 229.2472        |  |
| <b>Total</b> | <b>0.1007</b> | <b>0.3904</b> | <b>0.8902</b> | <b>3.9300e-003</b> | <b>0.3406</b> | <b>3.4900e-003</b> | <b>0.3441</b> | <b>0.0916</b>  | <b>3.2900e-003</b> | <b>0.0949</b> | <b>0.0000</b> | <b>374.5189</b> | <b>374.5189</b> | <b>0.0109</b> | <b>0.0273</b> | <b>382.9350</b> |  |

**3.5 Building Construction - 2025****Unmitigated Construction On-Site**

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2       | Total CO2       | CH4           | N2O           | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-----------------|-----------------|---------------|---------------|-----------------|
| Category     | tons/yr       |               |               |                    |               |               |               |                |               |               | MT/yr         |                 |                 |               |               |                 |
| Off-Road     | 0.1155        | 1.0537        | 1.3592        | 2.2800e-003        |               | 0.0446        | 0.0446        |                | 0.0419        | 0.0419        | 0.0000        | 195.9719        | 195.9719        | 0.0461        | 0.0000        | 197.1236        |
| <b>Total</b> | <b>0.1155</b> | <b>1.0537</b> | <b>1.3592</b> | <b>2.2800e-003</b> |               | <b>0.0446</b> | <b>0.0446</b> |                | <b>0.0419</b> | <b>0.0419</b> | <b>0.0000</b> | <b>195.9719</b> | <b>195.9719</b> | <b>0.0461</b> | <b>0.0000</b> | <b>197.1236</b> |

## Jefferson Oceanside Mixed Use Development - San Diego County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied****3.5 Building Construction - 2025****Unmitigated Construction Off-Site**

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2      | NBio- CO2       | Total CO2       | CH4                | N2O           | CO2e            |  |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|---------------|-----------------|-----------------|--------------------|---------------|-----------------|--|
| Category     | tons/yr       |               |               |                    |               |                    |               |                |                    |               |               | MT/yr           |                 |                    |               |                 |  |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        | 0.0000        | 0.0000          | 0.0000          | 0.0000             | 0.0000        | 0.0000          |  |
| Vendor       | 5.2700e-003   | 0.2103        | 0.0725        | 9.5000e-004        | 0.0320        | 1.2600e-003        | 0.0333        | 9.2300e-003    | 1.2100e-003        | 0.0104        | 0.0000        | 93.1498         | 93.1498         | 3.0600e-003        | 0.0135        | 97.2460         |  |
| Worker       | 0.0561        | 0.0357        | 0.4701        | 1.5100e-003        | 0.1877        | 9.4000e-004        | 0.1886        | 0.0499         | 8.7000e-004        | 0.0508        | 0.0000        | 143.0380        | 143.0380        | 3.6600e-003        | 3.6300e-003   | 144.2124        |  |
| <b>Total</b> | <b>0.0614</b> | <b>0.2460</b> | <b>0.5426</b> | <b>2.4600e-003</b> | <b>0.2197</b> | <b>2.2000e-003</b> | <b>0.2219</b> | <b>0.0591</b>  | <b>2.0800e-003</b> | <b>0.0612</b> | <b>0.0000</b> | <b>236.1878</b> | <b>236.1878</b> | <b>6.7200e-003</b> | <b>0.0171</b> | <b>241.4583</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     | tons/yr       |               |               |                    |               |               |               |                |               |               | MT/yr         |                 |                 |               |               |                 |
| Off-Road     | 0.0569        | 1.2021        | 1.5103        | 2.2800e-003        |               | 0.0115        | 0.0115        |                | 0.0115        | 0.0115        | 0.0000        | 195.9717        | 195.9717        | 0.0461        | 0.0000        | 197.1234        |
| <b>Total</b> | <b>0.0569</b> | <b>1.2021</b> | <b>1.5103</b> | <b>2.2800e-003</b> |               | <b>0.0115</b> | <b>0.0115</b> |                | <b>0.0115</b> | <b>0.0115</b> | <b>0.0000</b> | <b>195.9717</b> | <b>195.9717</b> | <b>0.0461</b> | <b>0.0000</b> | <b>197.1234</b> |

## Jefferson Oceanside Mixed Use Development - San Diego County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied****3.5 Building Construction - 2025****Mitigated Construction Off-Site**

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2      | NBio- CO2       | Total CO2       | CH4                | N2O           | CO2e            |  |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|---------------|-----------------|-----------------|--------------------|---------------|-----------------|--|
| Category     | tons/yr       |               |               |                    |               |                    |               |                |                    |               |               | MT/yr           |                 |                    |               |                 |  |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        | 0.0000        | 0.0000          | 0.0000          | 0.0000             | 0.0000        | 0.0000          |  |
| Vendor       | 5.2700e-003   | 0.2103        | 0.0725        | 9.5000e-004        | 0.0320        | 1.2600e-003        | 0.0333        | 9.2300e-003    | 1.2100e-003        | 0.0104        | 0.0000        | 93.1498         | 93.1498         | 3.0600e-003        | 0.0135        | 97.2460         |  |
| Worker       | 0.0561        | 0.0357        | 0.4701        | 1.5100e-003        | 0.1877        | 9.4000e-004        | 0.1886        | 0.0499         | 8.7000e-004        | 0.0508        | 0.0000        | 143.0380        | 143.0380        | 3.6600e-003        | 3.6300e-003   | 144.2124        |  |
| <b>Total</b> | <b>0.0614</b> | <b>0.2460</b> | <b>0.5426</b> | <b>2.4600e-003</b> | <b>0.2197</b> | <b>2.2000e-003</b> | <b>0.2219</b> | <b>0.0591</b>  | <b>2.0800e-003</b> | <b>0.0612</b> | <b>0.0000</b> | <b>236.1878</b> | <b>236.1878</b> | <b>6.7200e-003</b> | <b>0.0171</b> | <b>241.4583</b> |  |

**3.6 Architectural Coating - 2025****Unmitigated Construction On-Site**

|                 | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total         | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2     | Total CO2     | CH4                | N2O           | CO2e          |
|-----------------|---------------|---------------|---------------|--------------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category        | tons/yr       |               |               |                    |               |                    |                    |                |                    |                    | MT/yr         |               |               |                    |               |               |
| Archit. Coating | 1.8807        |               |               |                    |               | 0.0000             | 0.0000             |                | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Off-Road        | 5.2100e-003   | 0.0349        | 0.0552        | 9.0000e-005        |               | 1.5700e-003        | 1.5700e-003        |                | 1.5700e-003        | 1.5700e-003        | 0.0000        | 7.7874        | 7.7874        | 4.2000e-004        | 0.0000        | 7.7980        |
| <b>Total</b>    | <b>1.8859</b> | <b>0.0349</b> | <b>0.0552</b> | <b>9.0000e-005</b> |               | <b>1.5700e-003</b> | <b>1.5700e-003</b> |                | <b>1.5700e-003</b> | <b>1.5700e-003</b> | <b>0.0000</b> | <b>7.7874</b> | <b>7.7874</b> | <b>4.2000e-004</b> | <b>0.0000</b> | <b>7.7980</b> |

## Jefferson Oceanside Mixed Use Development - San Diego County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied****3.6 Architectural Coating - 2025****Unmitigated Construction Off-Site**

|              | ROG                | NOx                | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5     | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2      | Total CO2      | CH4                | N2O                | CO2e           |  |
|--------------|--------------------|--------------------|---------------|--------------------|---------------|--------------------|---------------|--------------------|--------------------|--------------------|---------------|----------------|----------------|--------------------|--------------------|----------------|--|
| Category     | tons/yr            |                    |               |                    |               |                    |               |                    |                    |                    |               | MT/yr          |                |                    |                    |                |  |
| Hauling      | 0.0000             | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000         | 0.0000         | 0.0000             | 0.0000             | 0.0000         |  |
| Vendor       | 0.0000             | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000         | 0.0000         | 0.0000             | 0.0000             | 0.0000         |  |
| Worker       | 4.0200e-003        | 2.5600e-003        | 0.0337        | 1.1000e-004        | 0.0135        | 7.0000e-005        | 0.0135        | 3.5700e-003        | 6.0000e-005        | 3.6400e-003        | 0.0000        | 10.2513        | 10.2513        | 2.6000e-004        | 2.6000e-004        | 10.3354        |  |
| <b>Total</b> | <b>4.0200e-003</b> | <b>2.5600e-003</b> | <b>0.0337</b> | <b>1.1000e-004</b> | <b>0.0135</b> | <b>7.0000e-005</b> | <b>0.0135</b> | <b>3.5700e-003</b> | <b>6.0000e-005</b> | <b>3.6400e-003</b> | <b>0.0000</b> | <b>10.2513</b> | <b>10.2513</b> | <b>2.6000e-004</b> | <b>2.6000e-004</b> | <b>10.3354</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        | tons/yr       |               |               |                    |               |                    |                    |                |                    |                    | MT/yr         |               |               |                    |               |               |
| Archit. Coating | 1.8807        |               |               |                    |               | 0.0000             | 0.0000             |                | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Off-Road        | 1.8100e-003   | 0.0414        | 0.0559        | 9.0000e-005        |               | 4.4000e-004        | 4.4000e-004        |                | 4.4000e-004        | 4.4000e-004        | 0.0000        | 7.7874        | 7.7874        | 4.2000e-004        | 0.0000        | 7.7980        |
| <b>Total</b>    | <b>1.8825</b> | <b>0.0414</b> | <b>0.0559</b> | <b>9.0000e-005</b> |               | <b>4.4000e-004</b> | <b>4.4000e-004</b> |                | <b>4.4000e-004</b> | <b>4.4000e-004</b> | <b>0.0000</b> | <b>7.7874</b> | <b>7.7874</b> | <b>4.2000e-004</b> | <b>0.0000</b> | <b>7.7980</b> |

## Jefferson Oceanside Mixed Use Development - San Diego County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied****3.6 Architectural Coating - 2025****Mitigated Construction Off-Site**

|              | ROG                | NOx                | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5     | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2      | Total CO2      | CH4                | N2O                | CO2e           |
|--------------|--------------------|--------------------|---------------|--------------------|---------------|--------------------|---------------|--------------------|--------------------|--------------------|---------------|----------------|----------------|--------------------|--------------------|----------------|
| Category     | tons/yr            |                    |               |                    |               |                    |               |                    |                    |                    | MT/yr         |                |                |                    |                    |                |
| Hauling      | 0.0000             | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000         | 0.0000         | 0.0000             | 0.0000             | 0.0000         |
| Vendor       | 0.0000             | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000         | 0.0000         | 0.0000             | 0.0000             | 0.0000         |
| Worker       | 4.0200e-003        | 2.5600e-003        | 0.0337        | 1.1000e-004        | 0.0135        | 7.0000e-005        | 0.0135        | 3.5700e-003        | 6.0000e-005        | 3.6400e-003        | 0.0000        | 10.2513        | 10.2513        | 2.6000e-004        | 2.6000e-004        | 10.3354        |
| <b>Total</b> | <b>4.0200e-003</b> | <b>2.5600e-003</b> | <b>0.0337</b> | <b>1.1000e-004</b> | <b>0.0135</b> | <b>7.0000e-005</b> | <b>0.0135</b> | <b>3.5700e-003</b> | <b>6.0000e-005</b> | <b>3.6400e-003</b> | <b>0.0000</b> | <b>10.2513</b> | <b>10.2513</b> | <b>2.6000e-004</b> | <b>2.6000e-004</b> | <b>10.3354</b> |

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

## Jefferson Oceanside Mixed Use Development - San Diego County, Annual

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

|             | ROG     | NOx    | CO     | SO2    | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4    | N2O    | CO2e      |  |
|-------------|---------|--------|--------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|--------|--------|-----------|--|
| Category    | tons/yr |        |        |        |               |              |            |                |               |             |          | MT/yr     |           |        |        |           |  |
| Mitigated   | 1.1839  | 0.9505 | 8.2557 | 0.0134 | 1.4639        | 0.0115       | 1.4754     | 0.3907         | 0.0108        | 0.4014      | 0.0000   | 1,281.050 | 1,281.050 | 0.1283 | 0.0755 | 1,306.764 |  |
| Unmitigated | 1.1839  | 0.9505 | 8.2557 | 0.0134 | 1.4639        | 0.0115       | 1.4754     | 0.3907         | 0.0108        | 0.4014      | 0.0000   | 1,281.050 | 1,281.050 | 0.1283 | 0.0755 | 1,306.764 |  |

**4.2 Trip Summary Information**

| Land Use                            | Average Daily Trip Rate |          |          | Unmitigated |            | Mitigated  |            |
|-------------------------------------|-------------------------|----------|----------|-------------|------------|------------|------------|
|                                     | Weekday                 | Saturday | Sunday   | Annual VMT  | Annual VMT | Annual VMT | Annual VMT |
| Apartments Mid Rise                 | 1,770.00                | 1,770.00 | 1770.00  | 3,814,138   | 3,814,138  | 3,814,138  | 3,814,138  |
| Fast Food Restaurant w/o Drive Thru | 2,100.00                | 2,100.00 | 2100.00  | 99,372      | 99,372     | 99,372     | 99,372     |
| Parking Lot                         | 0.00                    | 0.00     | 0.00     |             |            |            |            |
| Total                               | 3,870.00                | 3,870.00 | 3,870.00 | 3,913,510   | 3,913,510  | 3,913,510  | 3,913,510  |

**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 |
| Apartments Mid Rise            | 5.92       | 0.00       | 0.00        | 100.00     | 0.00       | 0.00        | 100            | 0        | 0       |
| Fast Food Restaurant w/o Drive | 0.00       | 0.13       | 0.00        | 0.00       | 100.00     | 0.00        | 100            | 0        | 0       |
| Parking Lot                    | 9.50       | 7.30       | 7.30        | 0.00       | 0.00       | 0.00        | 0              | 0        | 0       |

**4.4 Fleet Mix**

| Land Use                            | LDA      | LDT1     | LDT2     | MDV      | LHD1     | LHD2     | MHD      | HHD      | OBUS     | UBUS     | MCY      | SBUS     | MH       |
|-------------------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Apartments Mid Rise                 | 0.565387 | 0.062253 | 0.175474 | 0.116234 | 0.023574 | 0.006359 | 0.009156 | 0.006316 | 0.000699 | 0.000586 | 0.028465 | 0.000937 | 0.004559 |
| Fast Food Restaurant w/o Drive Thru | 0.565387 | 0.062253 | 0.175474 | 0.116234 | 0.023574 | 0.006359 | 0.009156 | 0.006316 | 0.000699 | 0.000586 | 0.028465 | 0.000937 | 0.004559 |

## Jefferson Oceanside Mixed Use Development - San Diego County, Annual

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

|             |          |          |          |          |          |          |          |          |          |          |          |          |          |
|-------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Parking Lot | 0.565387 | 0.062253 | 0.175474 | 0.116234 | 0.023574 | 0.006359 | 0.009156 | 0.006316 | 0.000699 | 0.000586 | 0.028465 | 0.000937 | 0.004559 |
|-------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

Install High Efficiency Lighting

|                         | ROG     | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total  | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4         | N2O         | CO2e     |
|-------------------------|---------|--------|--------|-------------|---------------|--------------|-------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|-------------|----------|
| Category                | tons/yr |        |        |             |               |              |             |                |               |             | MT/yr    |           |           |             |             |          |
| Electricity Mitigated   |         |        |        |             |               | 0.0000       | 0.0000      |                | 0.0000        | 0.0000      | 0.0000   | 206.0049  | 206.0049  | 0.0126      | 1.5100e-003 | 206.7692 |
| Electricity Unmitigated |         |        |        |             |               | 0.0000       | 0.0000      |                | 0.0000        | 0.0000      | 0.0000   | 241.2001  | 241.2001  | 0.0147      | 1.7700e-003 | 242.0950 |
| NaturalGas Mitigated    | 0.0144  | 0.1245 | 0.0636 | 7.8000e-004 |               | 9.9400e-003  | 9.9400e-003 |                | 9.9400e-003   | 9.9400e-003 | 0.0000   | 142.4010  | 142.4010  | 2.7300e-003 | 2.6100e-003 | 143.2473 |
| NaturalGas Unmitigated  | 0.0144  | 0.1245 | 0.0636 | 7.8000e-004 |               | 9.9400e-003  | 9.9400e-003 |                | 9.9400e-003   | 9.9400e-003 | 0.0000   | 142.4010  | 142.4010  | 2.7300e-003 | 2.6100e-003 | 143.2473 |

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

|                                     | NaturalGas Use | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total         | Fugitive PM2.5     | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2        | NBio- CO2       | Total CO2          | CH4                | N2O             | CO2e |
|-------------------------------------|----------------|---------------|---------------|---------------|--------------------|---------------|--------------------|--------------------|--------------------|--------------------|---------------|-----------------|-----------------|--------------------|--------------------|-----------------|------|
| Land Use                            | kBTU/yr        | tons/yr       |               |               |                    |               |                    |                    |                    |                    |               | MT/yr           |                 |                    |                    |                 |      |
| Apartments Mid Rise                 | 2.14643e+006   | 0.0116        | 0.0989        | 0.0421        | 6.3000e-004        |               | 8.0000e-003        | 8.0000e-003        | 8.0000e-003        | 8.0000e-003        | 0.0000        | 114.5419        | 114.5419        | 2.2000e-003        | 2.1000e-003        | 115.2226        |      |
| Fast Food Restaurant w/o Drive Thru | 522060         | 2.8200e-003   | 0.0256        | 0.0215        | 1.5000e-004        |               | 1.9400e-003        | 1.9400e-003        | 1.9400e-003        | 1.9400e-003        | 0.0000        | 27.8591         | 27.8591         | 5.3000e-004        | 5.1000e-004        | 28.0247         |      |
| Parking Lot                         | 0              | 0.0000        | 0.0000        | 0.0000        | 0.0000             |               | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000          | 0.0000          | 0.0000             | 0.0000             | 0.0000          |      |
| <b>Total</b>                        |                | <b>0.0144</b> | <b>0.1245</b> | <b>0.0636</b> | <b>7.8000e-004</b> |               | <b>9.9400e-003</b> | <b>9.9400e-003</b> | <b>9.9400e-003</b> | <b>9.9400e-003</b> | <b>0.0000</b> | <b>142.4010</b> | <b>142.4010</b> | <b>2.7300e-003</b> | <b>2.6100e-003</b> | <b>143.2473</b> |      |

## Jefferson Oceanside Mixed Use Development - San Diego County, Annual

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

|                                     | NaturalGas Use | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total         | Fugitive PM2.5     | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2        | NBio- CO2       | Total CO2          | CH4                | N2O             | CO2e |
|-------------------------------------|----------------|---------------|---------------|---------------|--------------------|---------------|--------------------|--------------------|--------------------|--------------------|---------------|-----------------|-----------------|--------------------|--------------------|-----------------|------|
| Land Use                            | kBTU/yr        | tons/yr       |               |               |                    |               |                    |                    |                    |                    |               | MT/yr           |                 |                    |                    |                 |      |
| Apartments Mid Rise                 | 2.14643e+006   | 0.0116        | 0.0989        | 0.0421        | 6.3000e-004        |               | 8.0000e-003        | 8.0000e-003        | 8.0000e-003        | 8.0000e-003        | 0.0000        | 114.5419        | 114.5419        | 2.2000e-003        | 2.1000e-003        | 115.2226        |      |
| Fast Food Restaurant w/o Drive Thru | 522060         | 2.8200e-003   | 0.0256        | 0.0215        | 1.5000e-004        |               | 1.9400e-003        | 1.9400e-003        | 1.9400e-003        | 1.9400e-003        | 0.0000        | 27.8591         | 27.8591         | 5.3000e-004        | 5.1000e-004        | 28.0247         |      |
| Parking Lot                         | 0              | 0.0000        | 0.0000        | 0.0000        | 0.0000             |               | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000          | 0.0000          | 0.0000             | 0.0000             | 0.0000          |      |
| <b>Total</b>                        |                | <b>0.0144</b> | <b>0.1245</b> | <b>0.0636</b> | <b>7.8000e-004</b> |               | <b>9.9400e-003</b> | <b>9.9400e-003</b> | <b>9.9400e-003</b> | <b>9.9400e-003</b> | <b>0.0000</b> | <b>142.4010</b> | <b>142.4010</b> | <b>2.7300e-003</b> | <b>2.6100e-003</b> | <b>143.2473</b> |      |

## Jefferson Oceanside Mixed Use Development - San Diego County, Annual

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

|                                     | Electricity Use | Total CO2       | CH4           | N2O                | CO2e            |
|-------------------------------------|-----------------|-----------------|---------------|--------------------|-----------------|
| Land Use                            | kWh/yr          | MT/yr           |               |                    |                 |
| Apartments Mid Rise                 | 1.13284e+006    | 210.3797        | 0.0129        | 1.5400e-003        | 211.1603        |
| Fast Food Restaurant w/o Drive Thru | 113460          | 21.0706         | 1.2900e-003   | 1.5000e-004        | 21.1488         |
| Parking Lot                         | 52500           | 9.7498          | 6.0000e-004   | 7.0000e-005        | 9.7859          |
| <b>Total</b>                        |                 | <b>241.2001</b> | <b>0.0147</b> | <b>1.7600e-003</b> | <b>242.0950</b> |

## Jefferson Oceanside Mixed Use Development - San Diego County, Annual

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

|                                     | Electricity Use | Total CO2       | CH4           | N2O                | CO2e            |
|-------------------------------------|-----------------|-----------------|---------------|--------------------|-----------------|
| Land Use                            | kWh/yr          | MT/yr           |               |                    |                 |
| Apartments Mid Rise                 | 990670          | 183.9772        | 0.0112        | 1.3500e-003        | 184.6597        |
| Fast Food Restaurant w/o Drive Thru | 100239          | 18.6154         | 1.1400e-003   | 1.4000e-004        | 18.6844         |
| Parking Lot                         | 18375           | 3.4124          | 2.1000e-004   | 3.0000e-005        | 3.4251          |
| <b>Total</b>                        |                 | <b>206.0049</b> | <b>0.0126</b> | <b>1.5200e-003</b> | <b>206.7692</b> |

**6.0 Area Detail****6.1 Mitigation Measures Area**

No Hearths Installed

## Jefferson Oceanside Mixed Use Development - San Diego County, Annual

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

|             | ROG     | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4         | N2O    | CO2e   |
|-------------|---------|--------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|--------|--------|
| Category    | tons/yr |        |        |             |               |              |            |                |               |             | MT/yr    |           |           |             |        |        |
| Mitigated   | 1.4276  | 0.0252 | 2.1918 | 1.2000e-004 |               | 0.0122       | 0.0122     |                | 0.0122        | 0.0122      | 0.0000   | 3.5848    | 3.5848    | 3.4400e-003 | 0.0000 | 3.6709 |
| Unmitigated | 1.4276  | 0.0252 | 2.1918 | 1.2000e-004 |               | 0.0122       | 0.0122     |                | 0.0122        | 0.0122      | 0.0000   | 3.5848    | 3.5848    | 3.4400e-003 | 0.0000 | 3.6709 |

**6.2 Area by SubCategory****Unmitigated**

|                       | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2     | Total CO2     | CH4                | N2O           | CO2e          |
|-----------------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| SubCategory           | tons/yr       |               |               |                    |               |               |               |                |               |               | MT/yr         |               |               |                    |               |               |
| Architectural Coating | 0.1881        |               |               |                    |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Consumer Products     | 1.1735        |               |               |                    |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Hearth                | 0.0000        | 0.0000        | 0.0000        | 0.0000             |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Landscaping           | 0.0660        | 0.0252        | 2.1918        | 1.2000e-004        |               | 0.0122        | 0.0122        |                | 0.0122        | 0.0122        | 0.0000        | 3.5848        | 3.5848        | 3.4400e-003        | 0.0000        | 3.6709        |
| <b>Total</b>          | <b>1.4276</b> | <b>0.0252</b> | <b>2.1918</b> | <b>1.2000e-004</b> |               | <b>0.0122</b> | <b>0.0122</b> |                | <b>0.0122</b> | <b>0.0122</b> | <b>0.0000</b> | <b>3.5848</b> | <b>3.5848</b> | <b>3.4400e-003</b> | <b>0.0000</b> | <b>3.6709</b> |

## Jefferson Oceanside Mixed Use Development - San Diego County, Annual

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

|                       | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10 | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2     | Total CO2     | CH4           | N2O                | CO2e          |               |
|-----------------------|---------------|---------------|---------------|--------------------|---------------|--------------|---------------|----------------|---------------|---------------|---------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| SubCategory           | tons/yr       |               |               |                    |               |              |               |                |               |               | MT/yr         |               |               |               |                    |               |               |
| Architectural Coating | 0.1881        |               |               |                    |               |              | 0.0000        | 0.0000         |               | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        |               |
| Consumer Products     | 1.1735        |               |               |                    |               |              | 0.0000        | 0.0000         |               | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        |               |
| Hearth                | 0.0000        | 0.0000        | 0.0000        | 0.0000             |               |              | 0.0000        | 0.0000         |               | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        |               |
| Landscaping           | 0.0660        | 0.0252        | 2.1918        | 1.2000e-004        |               |              | 0.0122        | 0.0122         |               | 0.0122        | 0.0122        | 0.0000        | 3.5848        | 3.5848        | 3.4400e-003        | 0.0000        | 3.6709        |
| <b>Total</b>          | <b>1.4276</b> | <b>0.0252</b> | <b>2.1918</b> | <b>1.2000e-004</b> |               |              | <b>0.0122</b> | <b>0.0122</b>  |               | <b>0.0122</b> | <b>0.0122</b> | <b>0.0000</b> | <b>3.5848</b> | <b>3.5848</b> | <b>3.4400e-003</b> | <b>0.0000</b> | <b>3.6709</b> |

**7.0 Water Detail****7.1 Mitigation Measures Water**

Apply Water Conservation Strategy

## Jefferson Oceanside Mixed Use Development - San Diego County, Annual

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

|             | Total CO2 | CH4    | N2O    | CO2e     |
|-------------|-----------|--------|--------|----------|
| Category    | MT/yr     |        |        |          |
| Mitigated   | 64.1494   | 0.5284 | 0.0128 | 81.1804  |
| Unmitigated | 80.1867   | 0.6605 | 0.0160 | 101.4754 |

**7.2 Water by Land Use****Unmitigated**

|                                     | Indoor/Out door Use  | Total CO2      | CH4           | N2O           | CO2e            |
|-------------------------------------|----------------------|----------------|---------------|---------------|-----------------|
| Land Use                            | Mgal                 | MT/yr          |               |               |                 |
| Apartments Mid Rise                 | 19.2204 / 12.1172    | 77.5759        | 0.6307        | 0.0153        | 97.9055         |
| Fast Food Restaurant w/o Drive Thru | 0.910601 / 0.0581235 | 2.6108         | 0.0298        | 7.2000e-004   | 3.5700          |
| Parking Lot                         | 0 / 0                | 0.0000         | 0.0000        | 0.0000        | 0.0000          |
| <b>Total</b>                        |                      | <b>80.1867</b> | <b>0.6605</b> | <b>0.0160</b> | <b>101.4754</b> |

## Jefferson Oceanside Mixed Use Development - San Diego County, Annual

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

|   | Indoor/Out<br>door Use  | Total CO2      | CH4           | N2O             | CO2e           |
|---|-------------------------|----------------|---------------|-----------------|----------------|
| Land Use                                  | Mgal                    | MT/yr          |               |                 |                |
| Apartments Mid<br>Rise                    | 15.3764 /<br>9.69379    | 62.0607        | 0.5045        | 0.0123          | 78.3244        |
| Fast Food<br>Restaurant w/o<br>Drive Thru | 0.728481 /<br>0.0464988 | 2.0886         | 0.0239        | 5.7000e-<br>004 | 2.8560         |
| Parking Lot                               | 0 / 0                   | 0.0000         | 0.0000        | 0.0000          | 0.0000         |
| <b>Total</b>                              |                         | <b>64.1494</b> | <b>0.5284</b> | <b>0.0128</b>   | <b>81.1804</b> |

**8.0 Waste Detail****8.1 Mitigation Measures Waste**

Institute Recycling and Composting Services

## Jefferson Oceanside Mixed Use Development - San Diego County, Annual

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

|             | Total CO2 | CH4    | N2O    | CO2e    |
|-------------|-----------|--------|--------|---------|
| MT/yr       |           |        |        |         |
| Mitigated   | 17.2806   | 1.0213 | 0.0000 | 42.8120 |
| Unmitigated | 34.5612   | 2.0425 | 0.0000 | 85.6240 |

**8.2 Waste by Land Use****Unmitigated**

|                                     | Waste Disposed | Total CO2      | CH4           | N2O           | CO2e           |
|-------------------------------------|----------------|----------------|---------------|---------------|----------------|
| Land Use tons MT/yr                 |                |                |               |               |                |
| Apartments Mid Rise                 | 135.7          | 27.5459        | 1.6279        | 0.0000        | 68.2437        |
| Fast Food Restaurant w/o Drive Thru | 34.56          | 7.0154         | 0.4146        | 0.0000        | 17.3803        |
| Parking Lot                         | 0              | 0.0000         | 0.0000        | 0.0000        | 0.0000         |
| <b>Total</b>                        |                | <b>34.5612</b> | <b>2.0425</b> | <b>0.0000</b> | <b>85.6240</b> |

## Jefferson Oceanside Mixed Use Development - San Diego County, Annual

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

|                                     | Waste Disposed | Total CO2      | CH4           | N2O           | CO2e           |
|-------------------------------------|----------------|----------------|---------------|---------------|----------------|
| Land Use                            | tons           | MT/yr          |               |               |                |
| Apartments Mid Rise                 | 67.85          | 13.7729        | 0.8140        | 0.0000        | 34.1219        |
| Fast Food Restaurant w/o Drive Thru | 17.28          | 3.5077         | 0.2073        | 0.0000        | 8.6901         |
| Parking Lot                         | 0              | 0.0000         | 0.0000        | 0.0000        | 0.0000         |
| <b>Total</b>                        |                | <b>17.2806</b> | <b>1.0213</b> | <b>0.0000</b> | <b>42.8120</b> |

**9.0 Operational Offroad**

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

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

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

**Boilers**

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

**User Defined Equipment**

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

Jefferson Oceanside Mixed Use Development - San Diego County, Annual

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

## **11.0 Vegetation**

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**ATTACHMENT B**

AERSCREEN Dispersion Modeling Results

AERSCREEN 11126 / AERMOD 1206

03/02/22  
09:03:23

TITLE: Jefferson Oceanside Apartments

\*\*\*\*\* AREA PARAMETERS \*\*\*\*\*

|                             |                                 |                                   |
|-----------------------------|---------------------------------|-----------------------------------|
| SOURCE EMISSION RATE:       | 0.520E-03 g/s                   | 0.413E-02 lb/hr                   |
| AREA EMISSION RATE:         | 0.685E-08 g/(s-m <sup>2</sup> ) | 0.544E-07 lb/(hr-m <sup>2</sup> ) |
| AREA HEIGHT:                | 3.00 meters                     | 9.84 feet                         |
| AREA SOURCE LONG SIDE:      | 275.50 meters                   | 903.87 feet                       |
| AREA SOURCE SHORT SIDE:     | 275.50 meters                   | 903.87 feet                       |
| INITIAL VERTICAL DIMENSION: | 1.00 meters                     | 3.28 feet                         |
| RURAL OR URBAN:             | URBAN                           |                                   |
| POPULATION:                 | 79000                           |                                   |
| FLAGPOLE RECEPTOR HEIGHT:   | 1.50 meters                     | 4.92 feet                         |
| INITIAL PROBE DISTANCE =    | 5000. meters                    | 16404. feet                       |

\*\*\*\*\* BUILDING DOWNWASH PARAMETERS \*\*\*\*\*

BUILDING DOWNWASH NOT USED FOR NON-POINT SOURCES

\*\*\*\*\* FLOW SECTOR ANALYSIS \*\*\*\*\*  
25 meter receptor spacing: 1. meters - 5000. meters

MAXIMUM IMPACT RECEPTOR

| Zo<br>SECTOR | SURFACE<br>ROUGHNESS | 1-HR CONC<br>(ug/m <sup>3</sup> ) | RADIAL<br>(deg) | DIST<br>(m) | TEMPORAL<br>PERIOD |
|--------------|----------------------|-----------------------------------|-----------------|-------------|--------------------|
| 1*           | 1.000                | 0.2908                            | 45              | 175.0       | WIN                |

\* = worst case diagonal

\*\*\*\*\* MAKEMET METEOROLOGY PARAMETERS \*\*\*\*\*

MIN/MAX TEMPERATURE: 250.0 / 310.0 (K)

MINIMUM WIND SPEED: 0.5 m/s

ANEMOMETER HEIGHT: 10.000 meters

SURFACE CHARACTERISTICS INPUT: AERMET SEASONAL TABLES

DOMINANT SURFACE PROFILE: Urban  
DOMINANT CLIMATE TYPE: Average Moisture  
DOMINANT SEASON: Winter

ALBEDO: 0.35  
BOWEN RATIO: 1.50  
ROUGHNESS LENGTH: 1.000 (meters)

METEOROLOGY CONDITIONS USED TO PREDICT OVERALL MAXIMUM IMPACT

YR MO DY JDY HR  
--- --- --- ---  
10 01 28 28 01

| H0    | U*    | W*     | DT/DZ | ZICNV | ZIMCH | M-O | LEN   | Z0   | BOWEN | ALBEDO | REF | WS |
|-------|-------|--------|-------|-------|-------|-----|-------|------|-------|--------|-----|----|
| -0.92 | 0.043 | -9.000 | 0.020 | -999. | 21.   | 8.5 | 1.000 | 1.50 | 0.35  | 0.50   |     |    |
| HT    | REF   | TA     | HT    |       |       |     |       |      |       |        |     |    |
| 10.0  | 310.0 | 2.0    |       |       |       |     |       |      |       |        |     |    |

METEOROLOGY CONDITIONS USED TO PREDICT AMBIENT BOUNDARY IMPACT

YR MO DY JDY HR

-----  
10 01 28 28 01

| H0    | U*    | W*     | DT/DZ | ZICNV | ZIMCH | M-O | LEN   | Z0   | BOWEN | ALBEDO | REF | WS |
|-------|-------|--------|-------|-------|-------|-----|-------|------|-------|--------|-----|----|
| -0.92 | 0.043 | -9.000 | 0.020 | -999. | 21.   | 8.5 | 1.000 | 1.50 | 0.35  | 0.50   |     |    |
| HT    | REF   | TA     | HT    |       |       |     |       |      |       |        |     |    |
| 10.0  | 310.0 | 2.0    |       |       |       |     |       |      |       |        |     |    |

\*\*\*\*\* AERSCREEN AUTOMATED DISTANCES \*\*\*\*\*  
OVERALL MAXIMUM CONCENTRATIONS BY DISTANCE

| DIST<br>(m) | MAXIMUM<br>1-HR CONC<br>(ug/m3) | DIST<br>(m) | MAXIMUM<br>1-HR CONC<br>(ug/m3) |
|-------------|---------------------------------|-------------|---------------------------------|
| 1.00        | 0.2148                          | 2524.99     | 0.1464E-01                      |
| 25.00       | 0.2275                          | 2550.00     | 0.1451E-01                      |
| 50.01       | 0.2397                          | 2575.00     | 0.1439E-01                      |
| 75.00       | 0.2511                          | 2600.00     | 0.1427E-01                      |
| 100.00      | 0.2618                          | 2625.01     | 0.1415E-01                      |
| 125.00      | 0.2718                          | 2650.00     | 0.1403E-01                      |
| 150.01      | 0.2817                          | 2675.00     | 0.1392E-01                      |
| 174.99      | 0.2908                          | 2700.00     | 0.1381E-01                      |
| 200.00      | 0.2768                          | 2725.01     | 0.1370E-01                      |
| 225.00      | 0.2232                          | 2749.99     | 0.1360E-01                      |
| 250.00      | 0.1897                          | 2775.00     | 0.1349E-01                      |
| 274.99      | 0.1675                          | 2800.00     | 0.1339E-01                      |
| 300.00      | 0.1510                          | 2825.00     | 0.1330E-01                      |
| 325.00      | 0.1380                          | 2850.00     | 0.1320E-01                      |
| 350.00      | 0.1265                          | 2875.00     | 0.1311E-01                      |
| 375.01      | 0.1170                          | 2900.00     | 0.1301E-01                      |
| 400.00      | 0.1089                          | 2925.00     | 0.1292E-01                      |
| 425.00      | 0.1019                          | 2950.00     | 0.1284E-01                      |
| 450.00      | 0.9581E-01                      | 2975.00     | 0.1275E-01                      |
| 475.01      | 0.9044E-01                      | 3000.00     | 0.1267E-01                      |
| 500.00      | 0.8568E-01                      | 3025.00     | 0.1259E-01                      |
| 525.00      | 0.8138E-01                      | 3050.00     | 0.1251E-01                      |
| 550.00      | 0.7750E-01                      | 3075.00     | 0.1243E-01                      |
| 575.01      | 0.7396E-01                      | 3100.00     | 0.1235E-01                      |
| 599.99      | 0.7073E-01                      | 3125.00     | 0.1228E-01                      |
| 625.00      | 0.6775E-01                      | 3150.00     | 0.1220E-01                      |
| 650.00      | 0.6502E-01                      | 3175.00     | 0.1213E-01                      |
| 675.00      | 0.6247E-01                      | 3200.00     | 0.1206E-01                      |
| 699.99      | 0.6009E-01                      | 3225.00     | 0.1199E-01                      |
| 725.00      | 0.5788E-01                      | 3250.00     | 0.1192E-01                      |
| 750.00      | 0.5581E-01                      | 3274.99     | 0.1186E-01                      |
| 775.00      | 0.5388E-01                      | 3300.00     | 0.1179E-01                      |
| 800.01      | 0.5206E-01                      | 3325.00     | 0.1172E-01                      |
| 825.00      | 0.5034E-01                      | 3350.00     | 0.1166E-01                      |
| 850.00      | 0.4872E-01                      | 3375.01     | 0.1160E-01                      |
| 875.00      | 0.4719E-01                      | 3400.00     | 0.1154E-01                      |
| 900.01      | 0.4574E-01                      | 3425.00     | 0.1147E-01                      |
| 924.99      | 0.4437E-01                      | 3450.00     | 0.1141E-01                      |
| 950.00      | 0.4308E-01                      | 3475.00     | 0.1135E-01                      |
| 975.00      | 0.4183E-01                      | 3500.00     | 0.1130E-01                      |
| 1000.00     | 0.4066E-01                      | 3525.00     | 0.1124E-01                      |
| 1024.99     | 0.3954E-01                      | 3550.00     | 0.1118E-01                      |
| 1050.00     | 0.3849E-01                      | 3575.00     | 0.1113E-01                      |
| 1075.00     | 0.3747E-01                      | 3600.00     | 0.1107E-01                      |
| 1100.00     | 0.3649E-01                      | 3625.00     | 0.1102E-01                      |
| 1125.01     | 0.3556E-01                      | 3650.00     | 0.1096E-01                      |
| 1150.00     | 0.3468E-01                      | 3675.00     | 0.1091E-01                      |
| 1175.00     | 0.3383E-01                      | 3700.00     | 0.1086E-01                      |
| 1200.00     | 0.3301E-01                      | 3725.00     | 0.1081E-01                      |
| 1225.01     | 0.3223E-01                      | 3750.00     | 0.1076E-01                      |
| 1250.00     | 0.3148E-01                      | 3775.00     | 0.1071E-01                      |
| 1275.00     | 0.3077E-01                      | 3800.00     | 0.1066E-01                      |
| 1300.00     | 0.3008E-01                      | 3825.00     | 0.1061E-01                      |
| 1325.01     | 0.2942E-01                      | 3850.00     | 0.1056E-01                      |
| 1349.99     | 0.2878E-01                      | 3875.00     | 0.1052E-01                      |
| 1375.00     | 0.2818E-01                      | 3900.00     | 0.1047E-01                      |
| 1400.00     | 0.2759E-01                      | 3925.00     | 0.1042E-01                      |
| 1425.00     | 0.2702E-01                      | 3950.00     | 0.1038E-01                      |
| 1449.99     | 0.2648E-01                      | 3975.01     | 0.1033E-01                      |
| 1475.00     | 0.2596E-01                      | 4000.00     | 0.1029E-01                      |
| 1500.00     | 0.2546E-01                      | 4025.00     | 0.1025E-01                      |
| 1525.00     | 0.2497E-01                      | 4050.00     | 0.1020E-01                      |
| 1550.01     | 0.2451E-01                      | 4075.00     | 0.1016E-01                      |
| 1575.00     | 0.2406E-01                      | 4100.00     | 0.1012E-01                      |
| 1600.00     | 0.2362E-01                      | 4125.00     | 0.1008E-01                      |
| 1625.00     | 0.2321E-01                      | 4150.00     | 0.1004E-01                      |
| 1650.01     | 0.2280E-01                      | 4175.00     | 0.9999E-02                      |
| 1674.99     | 0.2241E-01                      | 4200.00     | 0.9959E-02                      |
| 1700.00     | 0.2204E-01                      | 4225.00     | 0.9919E-02                      |

|         |            |         |            |
|---------|------------|---------|------------|
| 1725.00 | 0.2167E-01 | 4250.00 | 0.9879E-02 |
| 1750.00 | 0.2132E-01 | 4275.00 | 0.9840E-02 |
| 1774.99 | 0.2099E-01 | 4300.00 | 0.9801E-02 |
| 1800.00 | 0.2066E-01 | 4325.00 | 0.9763E-02 |
| 1825.00 | 0.2035E-01 | 4349.99 | 0.9726E-02 |
| 1850.00 | 0.2005E-01 | 4375.00 | 0.9688E-02 |
| 1875.01 | 0.1975E-01 | 4400.01 | 0.9651E-02 |
| 1900.00 | 0.1947E-01 | 4425.00 | 0.9614E-02 |
| 1925.00 | 0.1919E-01 | 4450.00 | 0.9578E-02 |
| 1950.00 | 0.1893E-01 | 4475.00 | 0.9543E-02 |
| 1975.00 | 0.1867E-01 | 4500.00 | 0.9508E-02 |
| 1999.99 | 0.1842E-01 | 4525.00 | 0.9472E-02 |
| 2025.00 | 0.1818E-01 | 4550.00 | 0.9437E-02 |
| 2050.00 | 0.1794E-01 | 4575.00 | 0.9402E-02 |
| 2075.00 | 0.1772E-01 | 4600.00 | 0.9368E-02 |
| 2099.99 | 0.1750E-01 | 4625.00 | 0.9334E-02 |
| 2125.00 | 0.1729E-01 | 4650.00 | 0.9300E-02 |
| 2150.00 | 0.1709E-01 | 4675.00 | 0.9266E-02 |
| 2175.00 | 0.1689E-01 | 4700.00 | 0.9508E-02 |
| 2199.99 | 0.1670E-01 | 4725.00 | 0.9473E-02 |
| 2225.00 | 0.1651E-01 | 4750.00 | 0.9437E-02 |
| 2250.00 | 0.1633E-01 | 4775.00 | 0.9402E-02 |
| 2275.00 | 0.1615E-01 | 4800.00 | 0.9368E-02 |
| 2300.01 | 0.1598E-01 | 4825.00 | 0.9333E-02 |
| 2325.00 | 0.1581E-01 | 4850.00 | 0.9299E-02 |
| 2350.00 | 0.1565E-01 | 4875.00 | 0.9266E-02 |
| 2375.00 | 0.1549E-01 | 4900.00 | 0.9232E-02 |
| 2400.01 | 0.1534E-01 | 4925.00 | 0.9199E-02 |
| 2424.99 | 0.1519E-01 | 4950.00 | 0.9166E-02 |
| 2450.00 | 0.1505E-01 | 4975.00 | 0.9134E-02 |
| 2475.00 | 0.1491E-01 | 5000.00 | 0.9102E-02 |
| 2500.00 | 0.1477E-01 |         |            |

\*\*\*\*\* AERSCREEN MAXIMUM IMPACT SUMMARY \*\*\*\*\*

3-hour, 8-hour, and 24-hour scaled concentrations are equal to the 1-hour concentration as referenced in SCREENING PROCEDURES FOR ESTIMATING THE AIR QUALITY IMPACT OF STATIONARY SOURCES, REVISED (Section 4.5.4) Report number EPA-454/R-92-019 [http://www.epa.gov/scram001/guidance\\_permit.htm](http://www.epa.gov/scram001/guidance_permit.htm) under Screening Guidance

| CALCULATION<br>PROCEDURE | MAXIMUM              | SCALED               | SCALED               | SCALED               | SCALED               |
|--------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
|                          | 1-HOUR               | 3-HOUR               | 8-HOUR               | 24-HOUR              | ANNUAL               |
|                          | CONC                 | CONC                 | CONC                 | CONC                 | CONC                 |
|                          | (ug/m <sup>3</sup> ) |
| FLAT TERRAIN             | 0.2971               | 0.2971               | 0.2971               | 0.2971               | N/A                  |

DISTANCE FROM SOURCE      193.00 meters

IMPACT AT THE AMBIENT BOUNDARY    0.2148    0.2148    0.2148    0.2148    N/A

DISTANCE FROM SOURCE      1.00 meters

**ATTACHMENT C**

Cancer Risk Calculations (Tier 3 with DPF Equipment)

| Air Quality Health Risk Calculations (Worst-Case)<br>Jefferson Oceanside Apartments Tier 3 with DPF |  |  |             |               |             |                    |
|---|--|--|-------------|---------------|-------------|--------------------|
| From CalEE Annual Output  | Emission per day (Ton/Total Construction Duration) |  |             |               |             | <b>0.03776</b>     |
|   | Construction Start                                 |  |             |               |             | <b>8/1/2023</b>    |
|   | Construction Complete                              |  |             |               |             | <b>8/25/2025</b>   |
|   | Days   |  |             |               |             | <b>755</b>         |
|   | Construction Emission per day (lb/day)             |  |             |               |             | <b>0.10002649</b>  |
|   | Annual Duration (Days)                             |  |             |               |             | <b>365</b>         |
|   | Annualized Emission Rate (Grams/Second)            |  |             |               |             | <b>0.000524444</b> |
|   | Project Site Size (Acres)                          |  |             |               |             | <b>18.75</b>       |
|   | Project Site Size (meters^2)                       |  |             |               |             | <b>75878.55792</b> |
|   | Length of Smalles Side (meters)                    |  |             |               |             | <b>275.4606286</b> |
| Used as an input to AERSCREEN   | Emission Rate over Grading Area( g/s-m^2)          |  |             |               |             | <b>6.91E-09</b>    |
| From AERSCREEN * 0.08 for annual per EPA  | Concentration Annual (ug/m^3)                      |  |             |               |             | <b>0.023264</b>    |
| Duration  | Days   |  |             | Days to years |             |                    |
|   | 755  |  |             | 2.068493151   |             |                    |
| Age (Years)   | 3rd Trimester (0.25)                               |  | 0-2         | 2-9           | 2-16        | 16-30              |
| Cair (annual) - From F15  | 0.023264   |  | 0.023264    | 0.023264      | 0.023264    | 0.023264           |
| Breathing Rate per agegroup BR/BW (Page 5-25)   | 361  |  | 1090        | 861           | 745         | 335                |
| A (Default is 1)  | 1  |  | 1           | 1             | 1           | 1                  |
| Exposure Frequency = EF (days/365days)  | 0.96   |  | 0.96        | 0.96          | 0.96        | 0.96               |
| 10^-6 Microgram to Milligram / liters to m3   | 0.000001   |  | 0.000001    | 0.000001      | 0.000001    | 0.000001           |
| Dose-inh  | 0.00000806   |  | 0.00002434  | 0.00001923    | 0.00001664  | 0.00000748         |
| Construction Days   | 755  |  | 2.068493151 |               |             |                    |
| potency factor for Diesel   | 1.1  |  | 1.1         | 1.1           | 1.1         | 1.1                |
| Age Sensitivity Factor  | 10   |  | 10          | 3             | 3           | 1                  |
| ED  | 0.25   |  | 2.068493151 | 2.068493151   | 2.068493151 | 2.068493151        |
| AT  | 70   |  | 70          | 70            | 70          | 70                 |
| FAH   | 0.85   |  | 0.85        | 0.72          | 0.72        | 0.73               |
| Risk for Each Age Group   | 2.69226E-07  |  | 6.72589E-06 | 1.35009E-06   | 1.16819E-06 | 1.7753E-07         |
| Risk per million Exposed  | 0.269225631  |  | 6.725890277 | 1.350085451   | 1.168192405 | 0.17753011         |
| Cancer Risk Per Million 9-years   | 8.35   |  |             |               |             |                    |
| Cancer Risk Per Million 30-years  | 8.34   |  |             |               |             |                    |
| <b>Cancer Risk Per Million 70-years</b>   | <b>8.32</b>  |  |             |               |             |                    |

